



torrshydro
NEW MILLS

Annual Report 2020/21



Torrs Hydro Annual Report, 2020-2021

Welcome!

It is with pleasure that the Torrs Hydro board brings you this annual report on the 13th year of operation – 13 years of generating renewable energy.

And it has been a good year. We feel we've made some positive progress with an upgrade to the plant which enables it to run more of the time and generate more power, an agreement to increase the price which the Coop buys our electricity, and a new roof on the shed which will hopefully be vandal-proof and serve for many years to come. And it has rained, so it has been a good year for power generation!

We have welcomed 68 new members to Torrs Hydro as a result of the share offer to help fund the upgrade to the plant. We are, as ever, grateful to all our members and volunteers – Together we make this happen!



Developments in 2020-21

In September 2020 we took the momentous decision to upgrade the plant to allow for a variable speed operation, thereby enabling the plant to run more often, at a wider range of water levels, and thus to generate more power. So the Autumn of 2020 was very busy with fundraising, planning and commissioning the various aspects of the upgrade.

We believe Torrs Hydro to be one of the first Community Benefit Societies in the UK to make a development share offer, to extend or enhance an existing business. Although we did not seek the Community Shares Standard Mark accreditation for our share offer, we aimed for it to meet the accreditation standard. We accordingly produced a new share offer document and business plan, and updated our application form. This was launched in December 2020.

Our target was to raise £25,000 towards the total cost of £50,000 for the works. The share offer ran for 6 weeks and was over-subscribed. This gave the board the awkward task of deciding how to reduce the number of shares offered to those requesting larger amounts. In the end £28,225 worth of shares were issued, raising the total currently issued from £121,356 to £149,581; and increasing the number of shareholders from 225 to 274 and the number of members by 68. (Our rules allow for an informal group of named individuals to jointly hold a share stake; we regard each member of the group as a member of Torrs Hydro, but in such cases, the group rather than each of the individuals in it has the member vote at general meetings.)

When it came to planning the plant upgrade, the first challenge was how to remove the sluice gate to refurbish it. We also had to work out how to fit the new control system into the limited space in the shed: the only way to do this was to relocate the hydraulic pump outside it. The plant was shut down for a fortnight at the end of November 2020 for the refurbishment to be carried out.

The new modern control system is very different, and took some getting used to. It is controlled using a touch screen display. It also has remote control facility which enables authorised volunteers to start, stop and monitor the system on a PC or mobile phone.

A new price for the electricity was agreed with the Coop in May 2021, taking it from 9.5 pence per unit (ppu) to 12ppu, an increase of 26%. This price increase was back-dated to January 2021.

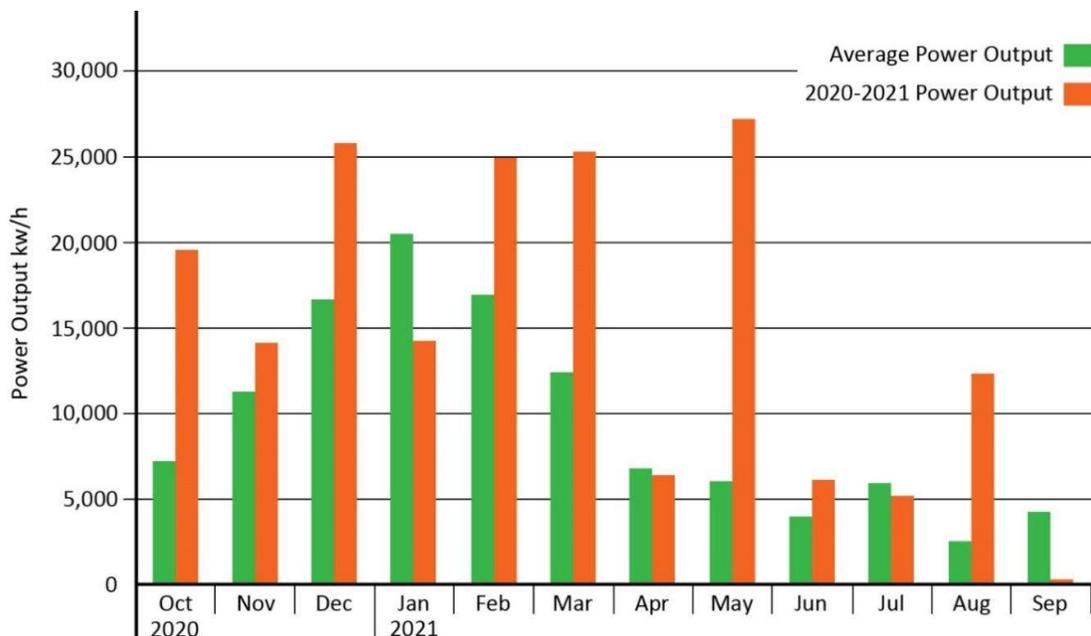
In the summer of 2021, after much research, the roof of the generating shed was replaced with an anti-vandal roofing. The old slate roof has seen several attacks over the years. The replacement is made of coated steel panels that give the appearance of a traditional roof while offering great strength.

After a period of positive successes for Torrs Hydro, the gearbox began to show signs of wear by September 2021, and has since had to be replaced.

Power Generation

The new variable speed control system has made a significant difference to our power generation. It has demonstrably enabled us to run at a wider range of river depths and has proved to be an excellent upgrade. Between December 2020 and September 2021, Archie has run 62% of the time, compared to a previous average of 35%.

With a good start to the financial year, prior to the two-week shut-down for the upgrade, and the subsequent increased running times, the power generation has been very good this year. 181 MWh is our second best annual total. The graph below shows this year compared to the previous average.



Financial Report

In 2020/21 we recorded a profit of £10,809 in comparison with a profit of £17,987 in 2020. The income from the sale of electricity was £38,377 compared with £19,957 in 2020. This was our best year ever and was due to a much better than average generation and an increased price paid for the electricity. In December, we spent £36,400 on the new control system. This is a capital cost in the accounts that will be depreciated of many years, so that the whole cost does not appear in this year's accounts.

The new control system was part funded from our reserves, and part funded by the additional share issue in early 2021.

The repairs and maintenance cost and consultancy fees of £8,529 and £3,452 respectively this year – against £2,619 and £500 in 2020 - have increased significantly. This is partly due to the update of the control system and partly due to work to improve the sluice gate reliability and other parts of the system. We have agreed a 5 year maintenance contract with Hydro Maintain (Hallidays Hydropower), which fulfils an insurance requirement and gives us continuity of service.

The other administrative expenses were generally similar to previous years. The depreciation has increased because of the increased value of our plant equipment. The costs also include the written off value of the old control system (£5,231) as an exceptional item.

Please refer to the full financial accounts for the year ending 30th September 2021 for the full financial statement. (See www.torrshydro.org or request from secretary@torrshydro.org or via 01663 898070.)

Volunteers

Torrshydro extends a big “thank you!” to all its volunteers. We rely very heavily on them and couldn't run without them.



Getting down and dirty – what volunteers get up to, heavy labour from 2016

At the moment we have 40 from all walks of life, ages and talents. Clearly, you can see a role for someone with a technical background or someone with a good enough back to shovel silt from the intake, but we have teachers, solicitors, community workers, a proof reader (*no spelling errors, now – Ed.*) Many are retired but not all. They have a range of skills to contribute, particularly when ideas are sought to solve engineering challenges. Conveniently for Torrshydro, potential volunteers tend to contact us rather than responding to a plea for help. Seven joined us in 2020-21 – possibly they were excited and inquisitive about the new variable speed control system, or perhaps the experience of the pandemic had inspired

them to want to do more about the things that really matter to them. For some the draw is to get out and do some physical labour as part of a team while others may prefer to work independently, for instance, if they make the daily plant check.

When someone enquires about volunteering, we meet on site and via an informal chat work out how they feel they can best fit in. If necessary, we arrange for them to work alongside somebody else to gain experience and confidence but if it's physical labour they offer, then we all just muck in together. A condition of our insurance requires that the plant receives a regular review by a professional hydro engineer, but daily checks and much of the day-to-day maintenance can be done by the volunteer team ensuring that Torrshydro can keep on running and generating clean, green electricity.

We are impressed by mix of ages getting involved, it all suggests that Torrshydro has a future!



Pictures: Steve Essex

Torrshydro New Mills Limited is a Community Benefit Society

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