Commercial
Engineering
Services

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Eggborough Power gives a 10/10 for CES's Oil Reclamation

Following analysis of oil test results for Eggborough Power Station's generator transformer 4, the Commercial Engineering Services (CES) team of National Grid were able to confirm that oil reclamation could be carried out, rather than oil replacement.

Given that the transformer contains 90,220 litres of oil, this presented a very significant cost saving for the customer. Oil replacement would have required up to 6 tankers to remove old oil and 6 to refill, so oil reclamation also meant a lot less disruption on site and a minimised CO_2 footprint from vehicle movement. Oil waste is also minimal with reclamation, which adds to the environmental benefits, and the outcome of effective reclamation is that the oil will have many similar characteristics to new oil.

Organising and Implementing the Work
The work was requested to be carried out to fit in with a planned outage, and National Grid's OMU (Oil Management Unit) were able to rearrange their workload to accommodate the customer's request. There was a site visit 7 working days after the request, carried out by one of our OMU Technicians, to gain a clear understanding of the customer's requirements, to assess safety, logistics and environmental factors, and to explain the process and the delivery plan to the customer.

Only 9 working days after the customer's request, the OMU team were on site carrying out the work, using one of their mobile high speed reclamation units. Oil reclamation is a process which eliminates, by physical and chemical absorbent means, the contaminants and products of oil deterioration, returning the oil to a 'near new' state. Since our high speed vehicles can also operate 24 hours a day, the team were able to complete 6 full passes of the oil in only 8 days, adding concentrated inhibitor in line with best-practise, and then completing the job with a top up of the oil level.

The Results
The final oil test results were outstanding, with the resistivity values increasing by over eight and a half times the original value. As is now standard practise for any large pieces of work, or outages, CES contacted the customer, Wayne Hall, Electrical Technical Engineer, to gather his feedback. We were delighted to receive a 10/10 customer satisfaction score, due to the way we organised and carried out the work.

Wayne comments, "National Grid provided a professional service that fully met my expectations. I had no concerns with the planning or delivery of the process."

Topping Up Transformers from Ground Level
Some months earlier National Grid's OMU team had carried out a top up of a transformer at

the Eggborough site, after a low oil alarm one Saturday morning. The OMU team, uniquely, are able to top up transformers from ground level. This reduces the time taken to carry out such work because there is no need for scaffolding to be erected, which also reduces costs and disruption on site. In this instance, it meant that the work was able to be completed within two hours of the request which meant that the transformer was out of operation for a minimal amount of time, saving the customer money.

If you wish to discuss any aspect of our Oil Management Services, please contact the Commercial Engineering Services (CES) team on: +44 (0)800 783 9228 or email: ces@nationalgrid.com