Response to Ofwat’s review of performance to the freeze/thaw

Ofwat’s ‘Out in the Cold’ review

In late February and early March 2018 bad weather – the ‘Beast from the East’ – created problems for many in the sector. The freezing conditions followed by the thaw impacted the supply of water to homes and businesses across the country.

In June Ofwat published its review into companies’ preparedness and response to the severe weather. Ofwat also wrote to each company summarising the actions it expected each to take to address perceived failings or where it considered improvements could mean that customers would receive a better service if such weather occurred again.

Ofwat has said that we “performed well and largely met customers’ expectations, but there is still room for improvement.” This is our response to the actions highlighted in Ofwat’s feedback to us.

How we prepared for and performed in the adverse weather conditions

The severe weather resulted in an increase in demand of 25%, attributable to increased leaks. These leaks were predominantly due to the freezing, and then bursting, of customers’ supply pipe work.

The condition of our network is paramount to the ability to maintain supplies in a wide range of weather conditions. Our main line of defence in relation to reducing the impact of severe weather is therefore the continual investment we make in maintaining the health of our assets. Poor integrity pipework is more susceptible to leakage and bursts, ultimately giving rise to supply interruptions to customers. We have invested in replacing the poorest quality mains in our network at a higher rate than most of the industry – and intend to continue this trend. This investment has helped us achieve industry-leading performance on bursts and upper-quartile performance on both leakage and supply interruptions.

We have a robust winter contingency plan (WCP) that is reviewed each year and implemented between 1 November and 31 March. The plan sets out in detail the mitigations that we will put in place if winter event triggers are forecast. For this particular event we used a medium-term weather forecast to assess the probable impact on our operation, including running comparisons with recent historical events of a similar nature. We enacted the following mitigations:

- Deployed additional employees in customer-facing roles to reassure and provide advice to concerned customers
- Redistributed supply-chain resource onto weather-related work and away from planned activity such as mains replacement projects
- Ensured that our production sites were fully operational and able to increase output in order to meet the predicted rise in demand caused by the thaw
- Deployed 4x4 vehicles to help our employees get to work and for use by operational staff to attend sites or locations within our supply area requiring a physical presence.

In total four customers lost supply for slightly over 36 hours during this event. This was due to unprotected pipework at a property, which was supplying livestock water troughs, freezing

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1 Out in the Cold – Water companies’ response to the ‘Beast from the East’, June 2018
and splitting resulting in a leak that caused depressurisation in a single rural district meter area.

**Lessons learnt and actions to address**

Ofwat’s feedback explains that we performed well. It asks us to respond to four areas where it considers we should provide more information or take action to address. We respond to each area below.

**Gathering of data**

Ofwat raised a concern that we were not able to measure low pressure interruptions and had to rely on customers informing us of such events. We confirm that this is not the case as we obtain real-time data from across our network.

Our supply area is divided into around 300 district metered areas (DMAs), each comprising around 1,000 properties. Each of these DMAs is equipped with a range of data gathering devices that we utilise on a constant basis to maintain a picture of how our network is operating. These devices include critical flow meters and pressure monitors, allowing us to measure the flow of water and the pressure in the DMA at all times. In addition, around half of our DMAs are equipped with critical pressure point (CPP) loggers that constantly measure pressure at the highest point, i.e. the point where water pressure is likely to be lowest in each DMA. Where we do not currently have CPP loggers installed we model the pressure at the highest point of the DMAs based on information from the DMA pressure monitor. By the end of the current financial year all DMAs will have CPP loggers installed and operational.

We also use alarms to highlight where the rate of change in service reservoir levels indicate a significant – or unpredicted – change in demand. This additional information helps provide a full overview of how our network is functioning, and allows us to pre-emptively change throughputs at our treatment works to compensate.

Our DMAs are generally smaller than others within the industry, and this provides a number of benefits, including the ability to pinpoint the location of any supply issues quicker and more easily within a smaller geographical area in the event of operational challenges – such as the severe weather in March this year. This allowed us to align resource deployment to problematic DMAs.

In practice, it is the combination of data gathered from our DMA devices and customer contact that allows us to assess the operational stability of DMAs and accurately pinpoint and address the root cause issues causing supply problems.

**Emergency response thresholds**

Ofwat noted that, in responding to it as part of the review, we were not clear on what our thresholds were for escalating an incident. We provide this clarity below.

Our management processes currently adopt a three-tiered approach to event management. We constantly keep our management processes under review. At the time of the severe weather our tiered approach to event management used the following thresholds.

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2 [5 years, 5 pledges – our business plan for 2020 to 2025](#), September 2018
<table>
<thead>
<tr>
<th>Event level</th>
<th>Status</th>
<th>Relevant example characteristics</th>
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| 0           | Business as usual | Watching brief on any developing situation (event pre-mobilisation), or routine operational activities.  
Examples: short-term outage to supplies effecting <100 properties, mains burst. |
| 1           | Incident  | Minor customer, stakeholder or environmental impact.  
Examples: short-term outage to supplies effecting <1,000 properties, strategic mains burst or multiple mains bursts, flood warning at operational site. |
| 2           | Emergency | Significant customer, stakeholder or environmental impact.  
Examples: short-term outage to supplies effecting <10,000 properties, multiple strategic mains bursts, imminent flooding of operational site. |
| 3           | Crisis    | Widespread or sustained customer, stakeholder or environmental impact.  
Examples: extended outage of supplies to >10,000 properties, flooding of operational site. |

These thresholds apply to a wide-range of event scenarios, and we have a specified list of such scenarios. Our response to each event scenario is understandably detailed. In the case of this severe weather event, the event scenario that was triggered was one in which there is a widespread supply interruption, as this was the most likely impact to our customers.

During the severe weather, we adopted an event level 0 – effectively a pre-mobilisation phase – until the point that multiple mains bursts were reported on 5 March, at which point we upgraded the event to level 1, in line with our procedures. This event level was maintained for a period of around 36 hours until we were comfortable that our network operation and supplies to all customers were stable.

**Enhanced compensation payments**

All customers of water companies are entitled to guaranteed minimum standards of service, through the Guaranteed Standards Scheme (GSS). This is laid down by the UK Government in the Water Supply and Sewerage Services (Customer Service Standards) Regulations 2008 (the ‘GSS Regulations’). Where we fail to deliver these standards we pay compensation to impacted customers.

We made GSS payment to the four customers that had their supply interrupted by more than 12 hours. Payments were made in line with the GSS regulations, and totalled £120 (£30 for each customer) for the outages which lasted slightly over 36 hours. We also delivered water to these customers for their personal use and for their livestock.

We consider the specific circumstance of each event when deciding whether if it would be reasonable to provide enhanced payments. On this occasion we decided not to pay
enhanced payments as we considered that we continued to provide a reasonable level of service to these customers through the provision of water to their property during the event.

During a more recent event, following a burst main adjacent to a railway line and high-pressure gas main, we decided that the specific circumstances of the event warranted enhanced payments. This was because the interruption lasted close to the 36 hours required to make an additional payment and customers were inconvenienced as the majority had to visit a water station to receive and alternative supply. In each case we paid compensation of £30 when the regulation required payment of £20.

Each event where there is an interruption to supply that lasts longer than three hours also contributes to the potential to pay a penalty under our supply interruptions performance commitment.

We have recently responded to Ofwat’s call for evidence on GSS compensation for supply not restored. In this we note our preference for revisions to the GSS regulations to include:

- The removal of the exemptions in order to simplify GSS payments, and with payments being triggered for each 24 hour period that a supply is lost, rather than different periods of between 12 and 48 hours applying dependent on the reason for the interruption.
- Increased payments in line with inflation
- Keeping the current flexibility which allows for companies to make voluntary payments where the particular circumstances of the event and its impact can be locally evaluated.

Sharing best practice
We are actively participating in the industry-wide group, lead by Water UK with CC Water, the Drinking Water Inspectorate and Ofwat, which is considering a range of issues focused on the learnings from the severe weather in February and March.

Elsewhere, we play an active and ongoing role in industry-wide technical forums focused on leakage and network operations. Specifically, and since the severe weather event, one of these key forums has been focused on the sharing of best practice in relation to customer-side leakage, and the challenges that the industry faces in better engagement with – and support for – customers to help reduce water loss from supply pipes, but also to reduce the impact of severe weather events such as that seen earlier this year.

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3 Call for evidence consultation – Guaranteed Standards Scheme, August 2018