

# GRENFELL TOWER INQUIRY

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## CADENT GAS LIMITED PHASE 1 CLOSING STATEMENT

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1. Cadent is a gas transporter, which owns and operates the pipes and associated equipment supplying natural gas to properties within its distribution networks. Grenfell Tower is in its North London network. Cadent distributes gas on behalf of gas suppliers who own the gas. Cadent is responsible for the gas pipes up to and including the valve (the emergency handle, or “Emergency Control Valve”) prior to the customers’ meters, but is not responsible for the meter or the pipe past the meter. In the case of the boiler in the basement of Grenfell Tower, Cadent’s responsibility ceased after the Emergency Control Valve in the basement.
2. In addition to isolating the gas supply at Grenfell Tower on 14<sup>th</sup> June 2017, Cadent was involved in riser replacement works at the Tower during 2016/17. The Inquiry has heard much evidence in relation to the refurbishment work undertaken at Grenfell Tower prior to this (between 2014 and 2016). Cadent was not involved in that refurbishment work, but there has been some confusion about this. In order to clarify the position we have set out a brief summary of Cadent’s works below and explain which pipes belong to Cadent and which do not. We then turn to Cadent’s involvement on 14<sup>th</sup> June 2017.

### **Riser replacement works 2016-17**

3. In line with Cadent’s engineering procedures, and unrelated to the refurbishment work, the gas riser pipelines (the vertical pipes carrying gas between the floors) in Grenfell Tower were subject to periodic inspections by Cadent. A small gas leak, due to corrosion, was detected on one of the risers during one such survey on 30

September 2016. The gas supply to the riser was therefore cut off, stopping the gas supply to flats with a number ending in a 2, of which 13 flats used a gas supply for cooking. These were the only flats affected by the replacement of the riser. Other risers within the building were not affected. Nor was the separate landlord gas supply feeding the boilers in the basement affected by the work.

4. On 1<sup>st</sup> October 2016, Cadent instructed tRIIO to design and construct new riser and lateral (i.e. horizontal) gas pipes to replace the riser that had been cut off. tRIIO is an unincorporated joint venture between Morrison Utility Services Limited and Skanska Construction UK Limited, which worked under the terms of a contract with Cadent. Under the Construction (Design and Management) Regulations 2015, tRIIO was both Principal Designer and Principal Contractor for the project, whilst Cadent was the Client. tRIIO was therefore responsible for planning and managing the design and construction of the replacement riser at Grenfell Tower in accordance with its contractual obligations. The new riser was operational in January 2017 and much of the accompanying work had been completed by tRIIO and its sub-contractors by 14 June 2017. However, in certain places they had not completed the “boxing-in”, or ducting, of the replacement gas pipes that was part of their design for the project (witness statement of Stephen Mason CAD00000004 and MET00019984).

#### **Clarification relating to pipes**

5. Cadent understands that as part of the refurbishment work undertaken between 2014 and 2016, boiler replacement works were carried out at Grenfell Tower. During the course of the Phase 1 evidence, there has been some confusion in respect of the boiler replacement works and the riser replacement works carried out by tRIIO on behalf of Cadent. There have been some references to the “gas board” putting pipes through the door header panels when replacing the boilers as part of the refurbishment work. Neither tRIIO nor Cadent had any involvement in the boiler replacement work. There have also been references to the “gas board” installing pipes in the communal lobby areas within a new plasterboard cupboard opposite the lift during the refurbishment work. Cadent understands that the plasterboard

cupboards house the hot water pipework and the pipework associated with the replacement boilers. This is completely unrelated to the gas supply.

6. The riser replacement work outlined above will be considered in Phase 2. The Inquiry's expert, Dr Barbara Lane, has started to consider matters connected to Grenfell Tower's gas installation. The Inquiry has instructed a further expert, Mr Rodney Hancox, to consider this area further. Cadent has provided substantial disclosure to the Inquiry to assist it with this and will continue to provide such assistance and information as is required.

#### **14 June 2017**

7. The Inquiry has heard evidence from Jason Allday, a senior Network Engineer in Cadent's Emergency Response and Repair team (Transcript 14/11/18, pp.1-117 and witness statements MET00012710 and CAD00003018). He attended the fire at Grenfell Tower during 14-15 June 2017. The Inquiry has also received and admitted into evidence the witness statements and exhibits of further members of the Cadent team attending the fire (see INQ00000529).
8. This body of evidence shows that:
  - a. An experienced team of Cadent operatives attended the fire. For example, Jason Allday had worked for Cadent and its predecessor, National Grid, for 20 years. His training included attendance at an incident management course at the Fire Service College, designed to provide Cadent operatives with the knowledge and skills to be able to manage an incident on site and work with the Fire Brigade, police and ambulance service – *"so that they can help you to get to where you need to get to so you can agree on a plan of work. Because normally they are dealing with much bigger things at the scene, we're dealing with just isolating gas, so it's obviously understanding what they need you to do and when they need you to do it"* (transcript 14/11/18, p.6:25 - p.7:5).

- b. The first Cadent operative was on site just 26 minutes after Cadent's receipt of the LFB's request for attendance (Jason Knightley, a First Call Operative, arrived on site at 03:48, following the LFB's 03:22 request; see MET00007821\_0002 and CAD00000002\_0001).
- c. As the Category 1 Responder, the LFB had primacy of the incident. Cadent attended the fire as a Category 2 Responder and sought direction from the LFB as to what was required of them. Cadent engineers approached the LFB to seek instructions at around 03:48 and again at around 05:35; the LFB told Cadent to "stand by". Around 07:45, when Jason Allday of Cadent went to the Command Unit, the LFB told him that they did now want Cadent to disconnect the gas supply to Grenfell Tower (MET00012710\_0004 – 0005).
- d. It was important to Jason Allday, who under his superiors, led the Cadent operation on the ground, that Cadent had a considered plan for its activities at each stage of the operatives' attendance at Grenfell Tower: from arrival at the site, before speaking to the LFB and through to isolation of the gas mains (transcript 14/11/18, p.26:4-12; p.30:15-24; p.43:24-44:6).
- e. It was immediately clear to Jason Allday that operation of any Pipeline Isolation Valves was not an option to turn off the gas supply to the building. This was primarily because of the intensity of the fire and the falling debris. As Jason Allday put it: *"that was just completely not accessible to get anywhere near that to even look for them because it was just too dangerous"* (transcript 14/11/18, p.36:7-9). Furthermore, it would have been necessary in any event also to complete a physical isolation of the gas mains behind the valves because of the potential that gas could seep past the valve at some point (transcript 14/11/18, p.33:24-25). Isolating the supply of gas by operating the Pipeline Isolation Valves was not a viable option.
- f. A plan had already been formulated prior to 07:45, subject to the LFB approval, to isolate the three mains feeding gas into Grenfell Tower, situated

at Grenfell Road, Testerton Walk and Station Walk. All three mains would need to be isolated in order to cut off the supply to the building. This was the most effective and efficient approach and was the only viable and practical option to isolate the gas. Attending engineers had previously worked in the area and had a good level of understanding of how the local gas network operated (MET00012710\_0007).

- g. The operation of excavating the mains is nonetheless a complex and invasive process, which involves digging down and cutting through the gas pipes in the ground. It required Cadent operatives to work in dangerous conditions, in close proximity to the building. To prepare them for the what lay ahead, Jason Allday gave his men a briefing prior to the commencement of work. He had decided to split his team into three groups working concurrently on the three isolation sites identified close to the Tower, as approved by the LFB. As he explained to the Inquiry: *"So I'd walked around. I'd seen some things which weren't very nice. I'd seen the whole entirety of what was going on. It was, you know, nothing I've ever seen before. So I just wanted to really prepare the guys that were going to go to work at these locations to make sure they weren't going to see any hidden surprise, that they knew that they were up against, but at the same time I was there to support them whatever they needed"* (transcript 14/11/18, p.70:21-71:4).
- h. It was a challenge just to get started: there were difficulties accessing and moving equipment to the isolation sites because of congestion and intense activity at the scene. In some cases, digging had to be by hand, because machinery could not reach the relevant site. Engineers worked in considerable heat and encountered distressing scenes as they worked. On two occasions they had to evacuate their sites at the direction of the LFB because of fears that the Tower might collapse. They returned to work having agreed a safe system of work with the LFB and with LFB spotters surveilling the building as Cadent worked, in case emergency evacuation was required (transcript 14/11/18, pp.73-79 and MET00012710).

- i. During the course of the excavations, the LFB asked Jason Allday whether Cadent would be prepared to enter the basement of Grenfell Tower with firefighters to attempt to disconnect the supply of gas by turning off the five isolation valves in the basement. He agreed to enter the basement in order to check if it was safe to send members of his team in there to do this task. The police shielded Jason Allday and his colleague Patrick Kelly from the falling debris with riot shields as they entered at around 15:50. Jason Allday could see that the valves on the risers in the basement were at a high level, as expected, and not accessible without the assistance of ladders or scaffolding. He estimated that it would have taken a team of four men up to an hour to turn off the valves on the risers. However, the basement was flooded up to the knees and the electricity was still on. The LFB officers then received a radio message to evacuate the building because of concern that it would collapse and they all withdrew. They had been in the basement for three to five minutes (transcript 14/11/18, p.81:11 – p.94:3 and MET00012710\_0011 to 0013).
  
- j. The Cadent teams were able to start on the Grenfell Road and Testerton Walk isolation sites at approximately 14:30 and succeeded in isolating these mains at around 20:00. They were able to start work more quickly at the Station Walk site, which was outside the inner cordon, unlike the other two sites. They commenced work there at around 13:30. However, they experienced difficulties in locating the main. When they did, they discovered that it was a 15-inch main and not the 12-inch main they were expecting. Different equipment would be necessary to isolate the larger diameter main, in normal circumstances. However, that equipment was not on site and it would have taken some time to get there. Given the urgency of the situation, the Cadent team was able to isolate the main using the equipment they had with them for a 12-inch isolation. This necessitated careful and considered improvisation on their part (MET00012710\_0014 to 0015). The additional work required by the fact that this was a 15-inch main added approximately

one hour to the time it took to isolate this main (transcript 14/11/18, p.107:2-8).

- k. When a temporary isolation was achieved at the Station Walk main at around 23:40, Jason Allday observed that the flames in the Tower diminished almost immediately (transcript 14/11/18, p.107:14 - p.108:9).

- 9. The Cadent experience at the Grenfell Tower fire was characterised by Jason Allday in this way:

*"It was just one of the most challenging situations I've ever been to... I had a great team above me and I had a really good team below me, and together they did a week's work in 24 hours, what we did down there, under really challenging conditions.*

*So I was quite proud to be part of that, not because of what it was, but because of what we did there and how quickly we did it, and proud to work for Cadent and deliver what we did on that night."*

- 10. It is consequently submitted that Cadent operatives worked very effectively on the ground on 14-15 June 2017 in uniquely difficult conditions in order to isolate the gas supply to Grenfell Tower as quickly as possible.

**6 December 2018**