Critical Contingency Operator

Critical Contingency Incident Report

Maui Pipeline Outage 25 – 30 October 2011

Date of Report: 04 November 2011

1. Introduction

This report has been prepared in accordance with the requirements contained in Regulation 64 of the Gas Governance (Critical Contingency Management) Regulations 2008 (Regulations). Regulation 64 requires the Critical Contingency Operator (CCO) to prepare and publish an incident report as soon as reasonably practicable, but no later than 5 business days after making a determination to terminate a Critical Contingency. This report has been prepared in consultation with the Transmission System Owners (TSOs) namely Maui Developments Limited (MDL) and Vector Gas Limited (Vector).

2. Cause Of Critical Contingency

Vector[1] investigated a reported gas escape adjacent to the 750mm nominal bore Maui pipeline close to the intersection of Pukearuhe Road and the White Cliffs Walkway in north Taranaki [E2642564 N6256219]. As a result Vector isolated and depressurised a 24.2km section of the Maui pipeline between Pukearuhe Main Line Valve and Mokau Compressor Station to investigate and repair the source of the escape. Under r48 (1) (b) (ii) the CCO determined that there was a critical contingency due to a reasonable expectation that a breach of one or more of the critical contingency thresholds was unavoidable.

This determination was based on an assessment that the line pack contained in the remaining pressurised section of the Maui pipeline to the north of Mokau Compressor Station would only be sufficient to supply predicted demand for approximately 9 hours before the critical contingency threshold of 3 hours to 32 barg would be breached at Rotowaro. Vector also advised that until the cause of the escape was determined the predicted repair time was uncertain but could be a number of days or weeks.

Vector discovered a through wall split of the pipeline at the 12 o'clock position adjacent to the longitudinal seam weld. The split was approximately 120mm long.

Vector is conducting a thorough investigation of the circumstances giving rise to the incident aimed at establishing the cause of the failure.

[1] Vector Gas Limited acts in the capacity of Technical Operator of the Maui pipeline for Maui Developments Limited under the provisions of the Contract of Employment that forms part of the Maui Joint Venture Agreement 1974. Vector Gas Limited is also the Transmission System Owner (TSO) for the Vector pipelines. Vector Gas Limited is a wholly owned subsidiary of Vector Limited.

3. Duration Of Critical Contingency

A critical contingency was declared at 01:25[2] on 25 October 2011 and was terminated at 12:00 on 30 October 2011. The duration of the critical contingency was 5 days, 10 hours and 35 minutes.

4. Log of Actions Taken by CCO and TSOs Immediately Before and During Critical Contingency

Note: The full contents of OATIS[3] notices issued can be referred to on www.oatis.co.nz by using the notice numbers quoted.

1. Potential Critical Contingency Stage	
Monday 24 October 2011	
Time	**Action**
20:33	Vector Gas Operations Control (GOC) phoned the CCO duty manager and gave a brief overview of a suspected gas escape that had been detected adjacent to the Maui pipeline in north Taranaki.
21:00	The CCO duty manager arrived at GOC at Bell Block and discussed the situation with the Vector Gas Transmission duty manager. Vector declared an emergency at 21:00 due to the potential severity of the situation and commenced the assembly of an emergency response team.
22:09	Vector completed the preparation of plans to isolate and depressurise the 24.2km section of the Maui pipeline between Pukearuhe Main Line Valve and Mokau Compressor Station to facilitate safe investigation and repair of the source of the escape.
22:15	Vector dispatched field personnel to Pukearuhe Main Line Valve and Mokau Compressor Station to prepare for the pipeline isolation.
22:45	The CCO discussed the situation with the Transpower Security Desk. Transpower indicated that sufficient power generation should be available from non gas fired power generation should demand be curtailed completely at Huntly Power Station, Southdown Power Station and Te Rapa Dairy Factory. [Note: Otahuhu Power Station was out of service for planned maintenance during the critical contingency].
22:50	The CCO issued Notification of Potential Critical Contingency [notice #11219].
22:52	The CCO discussed situation with Huntly Power Station Control Room who indicated that they would liaise with Transpower and make preparations to shut down Unit 5 and convert to full coal fuel at units 1-4.
23:05	Vector GOC informed the control rooms at all large consumers that a potential critical contingency had been notified by the CCO and that demand curtailment was likely at Huntly Power Station, Southdown Power Station and Te Rapa Dairy Factory.
23:14	MDL issued a notice giving notification of potential critical contingency (Notice #11220)

[2] All times given in this report are NZDT using ISO 8601 24-hour format.
[3] OATIS (Open Access Transmission Information System) is the online, interactive software system developed to support operations on both the Maui and Vector pipelines.

23:19	Vector issued a notice giving notification of potential critical contingency (Notice #11221)
23:29	The CCO requested a download of SCADA data from GOC to feed demand modelling calculations.
23:50	Vector carried out operations to increase line pack in the Vector 200 line and Bay Of Plenty (BOP) lateral in anticipation of isolation of Maui pipeline.
23:55	The CCO demand modelling indicated that line pack to the north of Mokau Compressor Station would only be sufficient to supply existing demand for approximately 9 hours before the 3 hours to 32 barg critical contingency threshold at Rotowaro would be breached. The CCO modelling also indicated that if the band 1a and 1b large consumers at Huntly Power Station, Southdown Power Station and Te Rapa Dairy Factory were curtailed there would be sufficient line pack to supply demand for approximately 21 hours before the 3 hours to 32 barg critical contingency threshold at Rotowaro would be breached.
Tuesday 25 October 2011	
01:00	Vector closed the Pukearuhe Main Line Valve as the first step in isolating the section of pipeline containing the escape. The pressure in the Maui pipeline at the time of isolation was 44 barg. Mokau Compressor Station continued to operate in order to reduce the pressure between Pukearuhe and Mokau and to increase pressure and line pack north of Mokau.
01:20	Mokau Compressor Station was stopped when the pipeline pressure reached 38.4 barg and the Mokau Main Line Valve was then closed. The pipeline section between Pukearuhe Main Line Valve and Mokau Compressor Station was then fully isolated.
2. Declaration of Critical Contingency Stage	
01:10	The CCO determined that a critical contingency situation existed.
01:25	The CCO issued a notice declaring a critical contingency [notice #11224].
01:30	GOC informed the control rooms at all large consumers that the CCO had declared a critical contingency and that demand curtailment directions would follow for Huntly Power Station, Southdown Power Station and Te Rapa Dairy Factory.
01:35	Vector started Mahoenui Compressor Station to increase pressure and line pack in the Vector 200 line.
01:41	MDL issued a notice of declaration of critical contingency (notice #11223).
01:44	Vector issued a notice of declaration of critical contingency (notice #11222).
3. Demand Curtailment Stage	
02:35	The CCO issued a notice directing demand to be fully curtailed at the band 1a and 1b large consumers at Huntly Power Station, Southdown Power Station and Te Rapa Dairy Factory by 03:30 [Notice #11227].
03:00	GOC informed the control rooms at all large consumers that the CCO had issued demand curtailment directions for Huntly Power Station, Southdown

	Power Station and Te Rapa Dairy Factory to fully curtail by 03:30.
03:03	MDL issued a notice directing demand to be fully curtailed at the band 1a and 1b large consumers at Huntly Power Station, Southdown Power Station and Te Rapa Dairy Factory by 03:30 (Notice #11225).
03:12	Vector issued a notice directing demand to be fully curtailed at the band 1a and 1b large consumers at Huntly Power Station, Southdown Power Station and Te Rapa Dairy Factory by 03:30 (Notice #11226).
04:00	The CCO and the Vector emergency response team discussed and agreed the principles to be applied when using the Vector 200 line and any residual line pack in the Maui pipeline to supply demand in the Vector pipelines. • Normally closed Main Line Valve at Temple View delivery Point to be opened to allow gas in the Vector 200 line to flow north towards Rotowaro Compressor Station. • Rotowaro Compressor Station to be re-configured to allow gas from the Vector 200 line to be compressed for onwards transmission north. Re-configuration will temporarily prevent gas from the Maui pipeline being available for compression for onward transmission. • Residual line pack in the Maui pipeline available for compression at the Vector Pokuru Compressor Station for onward transmission to the Vector BOP lateral. • Mahoenui Compressor Station to be utilised to manage pressure and line pack in the Vector pipelines. Vector advised the CCO that the maximum flow available from Mahoenui Compressor Station would be approximately 10 SCMS [1,440 GJ/hour]. Capacity would need to be used to supply demand off take and replenish pressure and line pack during off-peak periods. • Demand in the Vector pipeline north of Mahoenui Compressor Station to be controlled carefully by curtailing demand to minimum levels and making public appeals to use gas sparingly. System to be monitored carefully and demand levels at morning and evening peaks noted. Any spare identified capacity to be utilised where possible to resupply any curtailed demand. • Time to repair and resumption of normal service of the Maui pipeline indeterminate at this stage.
07:00	Vector advised the CCO that they had concern that the Vector 200 line may be impacted. In view of this the CCO decided that further curtailment in the affected areas would now need to be activated.
08:00	The CCO estimated domestic demand in the affected area would peak at approximately 8.5 SCMS [1,224 GJ/hour]. The CCO carried out further demand modelling to assess peak demand levels in bands 2-6.
10:00	Morning demand peaked at 20.5 SCMS (2,952 GJ/h) in the affected area. Gas continued to be drawn from residual line pack in the Maui pipeline for compression and onward transmission at Rotowaro Compressor Station.
10:15	Due to the uncertainties associated with the integrity of the Vector 200 line and the time it may take for curtailment directions to be effectively implemented the CCO decided that full curtailment of band 2-6 consumers would now be required in order to conserve line pack in the Vector pipeline should this also need to be isolated. Vector and the Gas Industry Company (GIC) commenced plans to issue a

	media release including a general public appeal for gas to be used sparingly if in the domestic sector.
10:35	Vector commenced depressurisation of the isolated section by venting gas at Mokau Compressor Station.
10:40	The CCO issued a revised demand curtailment direction for all band 2 – 6 consumers to curtail demand immediately in the affected areas [notice #11237 and #11238].
10:53	Vector opened the Temple View Main Line Valve to allow gas in the Vector 200 line to flow north towards Rotowaro Compressor Station.
11:08	MDL issued a revised curtailment direction for all band 2 – 6 consumers to curtail demand immediately in the affected areas [notice #11239].
11:09	Vector issued a revised curtailment direction for all band 2 – 6 consumers to curtail demand immediately in the affected areas [notice #11241 and #11242].
11:26	Vector issued a corrected revised curtailment direction for all band 2 – 6 consumers to curtail demand immediately in the affected areas [notice #11243 and #11244].
12:55	Vector completed depressurisation of the isolated section.
13:07	Vector confirmed that the gas escape has now ceased giving positive identification that the Maui pipeline was the source of escape.
15:42	Vector completed re-configuration of Rotowaro Compressor station to accept gas from the Vector 200 line for compression and onward transmission north.
16:00	Vector advised the CCO that the Vector 200 line was in a secure condition but surrounding works on the Maui pipeline needed to be carried out carefully to ensure ongoing integrity. This meant that confidence levels had increased in the continued availability of the Vector 200 line to supply the affected area for the duration of the incident. The CCO decided that restoration of partial demand could now be considered depending on actual system pressures and off take rates.
17:00	Evening peak demand period commenced. The CCO monitored system performance to assess levels of demand curtailment and to check if calculated demands in the domestic sector matched actual demand profile.
19:30	Vector commenced excavation of the Maui pipeline at the location of the escape.
20:00	Evening demand peaked at 6.5 SCMS (950 GJ/h). Residual line pack from the Maui pipeline was used between 14:00 and 22:00 to supply the Vector BOP lateral during the implementation of demand curtailment and the reduction of demand on the Vector pipeline.
Wednesday 26 October 2011	
02:00	Vector discovered a through wall split of the pipeline at the 12 o'clock position adjacent to the longitudinal seam weld. The split was approximately 120mm long.
06:00	Morning peak demand period commenced. CCO monitored system performance to assess levels of demand curtailment and to check if calculated demands in the domestic sector matched actual demand profile.

09:00	Morning demand peaked at 7.3 SCMS (1,051 GJ/h). This indicated that demand curtailment had been particularly effective and that domestic consumption had dropped significantly from seasonal norms. Vector pipeline line pack increased moderately during the previous day due to the significant demand curtailment that had been implemented. After consultation with Vector, the CCO determined that some demand from curtailed bands could be restored if used sparingly. This view was also supported by the information Vector provided at 16:00 on 25 October regarding increased confidence levels about continued 200 line integrity. Due to the potential hardships gas curtailment was causing in band 5 (essential service providers) and the environmental concerns over the inability of dairy factories to receive and process raw milk, the CCO decided after consultation with the industry that a revised curtailment direction to restore gas to band 5 consumers (but to use sparingly) would be issued. The CCO also determined that there may be some system capacity available to restore supply to consumers to be re-designated to band 5 by their retailer. The CCO indicated that retailers would need to give him formal notification of these and that they would be assessed on a case-by-case basis before being released for restoration.
09:45	The CCO issued a revised demand curtailment direction for band 5 to be restored but to use gas sparingly in all circumstances (notice #11260 and #11261). The CCO demand modelling indicated that band 5 demand would peak at approximately 1.6 SCMS (230 GJ/hour). The total number of band 5 consumers in the affected area was 202.
10:08	MDL issued a revised demand curtailment direction for band 5 to be restored but to use gas sparingly in all circumstances (notice #11263).
10:19	Vector issued a revised demand curtailment direction for band 5 to be restored but to use gas sparingly in all circumstances (notice #11259 and #11264).
17:00	Evening peak demand period commenced. The CCO monitored system performance to assess levels of demand curtailment and to check if calculated demands matched the actual demand profile.
18:00	Vector advised that the isolated section of the Maui pipeline had now been purged of gas and that preparations were being made to cut the pipeline to remove the damaged section. Vector plans to prepare a new section of pipe to replace the damaged section were in progress.
20:00	By this time the CCO had received confirmation from retailers about 15 consumer re-designations to band 5. Each of these were assessed and approved based on an assessment that spare capacity would be available.
20:30	Evening demand peaked at 7.8 SCMS (1,123 GJ/hour).
Thursday 27 October 2011	
06:00	Morning peak demand period commenced. The CCO monitored system performance to assess levels of demand curtailment compliance and to check if calculated demands matched actual demand profile.
09:00	Morning demand peaked at 12.3 SCMS (1,771 GJ/hour). This indicated that demand had now built following the restoration of band 5 the previous morning and band 5 re-designations during the previous day. Vector pipeline line pack decreased moderately during the previous day due to demand restoration. No residual line pack from the Maui pipeline was required to

	supply during the previous day. It was identified that 3.0 SCMS (432 GJ/hour) of this peak demand was being consumed by a large consumer previously directed to curtail demand fully. The CCO urgently discussed this situation with the large consumer and their gas supplier and demand was promptly curtailed in full.
09:30	Based on the underlying peak demand being 9.3 SCMS (1,340 GJ/hour), the CCO determined, after consultation with Vector that some further demand from curtailed bands could be restored if used sparingly. The CCO decided that band 6 could be restored under the prevailing conditions while reserving provision for further band 5 re-designations to be catered for if required.
10:20	The CCO issued a revised demand curtailment direction for band 6 to be restored but to use gas sparingly in all circumstances (notice #11273 and #11274). The CCO demand modelling indicated that band 6 demand would peak at approximately 2.0 SCMS (288 GJ/hour). The total number of band 6 consumers in the affected area was 8997.
10:35	MDL issued a revised demand curtailment direction for band 6 to be restored but to use gas sparingly in all circumstances (notice #11275).
10:36	Vector issued a revised demand curtailment direction for band 6 to be restored but to use gas sparingly in all circumstances (notice #11276 and #11277).
11:00	Vector completed the cut out of the damaged section of pipeline and detailed dimensional checks for the preparation of a new pipe spool to replace the damaged section.
17:00	Evening peak demand period commenced. The CCO monitored system performance to assess levels of demand curtailment and to check if calculated demands matched the actual demand profile.
18:00	By this time the CCO received confirmation from retailers about a further 10 consumer re-designations to band 5. Each of these were assessed and approved based on an assessment that spare capacity would be available.
20:00	Vector commenced fabrication of a new pipe spool to replace damaged section in a contactor's New Plymouth workshop. Vector was nearing completion and approval of the Non-Routine Operational Procedure for re-commissioning the isolated pipeline.
20:30	Evening demand peaked at 8.5 SCMS (1,224 GJ/hour).
Friday 28 October 2011	
04:00	Vector delivered the newly fabricated replacement pipe spool to site for installation.
06:00	Morning peak demand period commenced. The CCO monitored system performance to assess levels of demand curtailment compliance and to check if calculated demands matched the actual demand profile.
09:00	Morning demand peaked at 10.5 SCMS (1,512 GJ/hour). This indicated that demand had now built up further following the restoration of band 5 on Wednesday morning followed by the restoration of band 6 on Thursday morning and the band 5 re-designations during the previous two days. Vector pipeline line pack decreased moderately during the previous day due to demand restoration. No residual line pack from the Maui pipeline was required to supply during the previous day.

09:30	Based on utilising line pack availability in the Vector pipeline with the possibility of using available residual line pack from the Maui pipeline, the CCO determined, after consultation with Vector that some further demand from curtailed bands could be restored if used sparingly. The CCO decided that band 4 could be restored under the prevailing conditions while reserving provision for further band 5 re-designations to be catered for if required.
10:50	The CCO issued a revised demand curtailment direction for band 4 to be restored but to use gas sparingly in all circumstances (notice #11280 and #11281). CCO demand modelling indicated band 4 demand would peak at approximately 1.0 SCMS (144 GJ/hour). The total number of band 4 consumers in the affected area was 816.
11:08	MDL issued a revised demand curtailment direction for band 4 to be restored but to use gas sparingly in all circumstances (notice #11285).
11:11	Vector issued a revised demand curtailment direction for band 4 to be restored but to use gas sparingly in all circumstances (notice #11286 and #11287).
12:45	Vector completed final cutting of the existing pipeline and tack welded the new pipe spool into place ready for butt welding. Vector had obtained the required approval from Lloyds register for the repair methodology.
13:17	The CCO issued a notice to the Gas Industry Company, the Ministry of Civil Defence and Emergency Management and the Ministry of Economic Development and the Ministry of Energy regarding the continuance of the critical contingency beyond 3 days from declaration.
17:00	Evening peak demand period commenced. The CCO monitored system performance to assess levels of demand curtailment and to check if calculated demands matched the actual demand profile.
18:00	By this time the CCO received confirmation from retailers about a further 7 consumer re-designations to band 5. Each of these were assessed and approved based on an assessment that spare capacity would be available.
20:00	Vector had fully welded the new section of pipeline and commenced the initial set of Non Destructive Testing (NDT) of the welds.
20:30	Evening demand peaked at 11.5 SCMS (1,656 GJ/hour).
Saturday 29 October 2011	
06:00	Morning peak demand period commenced. The CCO monitored system performance to assess levels of demand curtailment compliance and to check if calculated demands matched actual demand profile.
08:00	Vector informed the CCO that the initial set of NDT was passed as satisfactory.
09:00	Morning demand peaked at 13.8 SCMS (1,987 GJ/hour). This indicated that general demand was building due to the restoration of bands 4, 5 and 6 during the last three days and the approved band 5 re-designations. Vector pipeline line pack decreased markedly during the previous day due to demand restoration. No residual line pack from the Maui pipeline was required to supply during the previous day.
09:30	The CCO determined, after consultation with Vector, that there was no additional system capacity to restore any further curtailment bands and that off take limits had reached maximum allowable limits given the maximum advisable volume the Vector pipeline could supply and continuing downward

	line pack trend. The CCO identified that further small additional band 5 re-designations may be allowable.
11:00	By this time the CCO received confirmation from retailers about one further consumer re-designation to band 5. This was assessed and approved based on an assessment that spare capacity would be available.
13:00	Due to increasing demand on the Vector 200 line, residual line pack from the Maui pipeline was taken through the Vector Pokuru Compressor Station to supply the Vector BOP lateral.
14:15	The CCO held discussions with Transpower, Genesis and Mighty River Power regarding the planned build up of demand scheduled for early Sunday morning subject to final approvals to re-commission the pipeline. An incremental demand build plan was agreed to ensure safe pipeline operation while satisfying the needs of the generators and Transpower.
20:00	Vector confirmed that the final set of NDT had been completed and passed as satisfactory.
23:45	Vector prepared the pipeline for commencement of the re-commissioning procedure.
Sunday 30 October 2011	
02:00	Vector completed purging and re-pressurisation of the isolated section of pipeline. Vector opened the Main Line Valves at Pukearuhe and Mokau Compressor Station to restore the Maui pipeline to normal service.
02:30	Vector reconfigured Rotowaro Compressor Station to accept gas from the Maui pipeline for compression and onward transmission north. Vector re-closed the Main Line Valve at Temple View delivery point to return the Vector pipeline to normal operational configuration.
5. Demand Restoration Stage	
02:30	The CCO issued a direction for demand to be fully restored to bands 2 and 3 and for the restriction to use gas sparingly for bands 4, 5 and 6 lifted from 03:00 (notice #11293 and #11294). CCO demand modelling indicated that bands 2 and 3 demand would peak at approximately 2.0 SCMS (288 GJ/hour) and 10 SCMS (1,440 GJ/hour) respectively. The total number of consumers in bands 2 and 3 were 11 and 1039 respectively.
02:55	MDL issued a direction for demand to be fully restored to bands 2 and 3 and for the restriction to use gas sparingly for bands 4, 5 and 6 lifted from 03:00 (notice #11290).
03:00	Vector issued a direction for demand to be fully restored to bands 2 and 3 and for the restriction to use gas sparingly for bands 4, 5 and 6 lifted from 03:00 (Notice #11291 and #11292).
03:00	Vector and the CCO monitored the system closely for any large or sudden increases in demand.
03:30	The CCO issued a direction for demand to band 1a and 1b consumers at Huntly Power Station, Southdown Power Station and Te Rapa Dairy Factory to be restored in the agreed increments commencing at 04:00 (notice #11295 and #11296).
03:50	MDL issued a direction for demand to band 1a and 1b consumers at Huntly Power Station, Southdown Power Station and Te Rapa Dairy Factory to be

	restored in the agreed increments commencing at 04:00 (notice #11299).
03:50	Vector issued a direction for demand to band 1a and 1b consumers at Huntly Power Station, Southdown Power Station and Te Rapa Dairy Factory to be restored in the agreed increments commencing at 04:00 (notice #11300 and #11301).
04:00	Vector and the CCO monitored the system closely for any large or sudden increases in demand.
6. Termination of Critical Contingency Stage	
11:30	Vector and the CCO discussed system performance and demand build up since the issue of the demand restoration notice. The CCO was satisfied that the transmission system was capable of supplying gas to all consumers at the level at which it was supplied immediately before the event.
12:00	The CCO made a determination to terminate the critical contingency and issue a notice declaring the termination (notice #11303).
12:08	Vector issued a notice declaring the termination of the critical contingency (notice #11305).
12:09	MDL issued a notice declaring the termination of the critical contingency (notice #11304).

5. Level Of General Compliance By Large Consumers And Retailers With TSO Directions

General compliance levels by retailers and large consumers appeared to be very good. This is borne out by the significantly reduced demand levels observed on the system during the critical contingency.

During the incident the CCO became aware of a small number of circumstances where large consumers did not fully comply with the curtailment direction issued at 02:35 on 25 October 2011 (notice #11227).

During the incident the CCO also became aware of a small number of circumstances where band 3 consumers did not fully comply with the curtailment direction issued at 10:40 on 25 October 2011 (notice #11237 and #11238).

No large consumers supplied the TSOs with demand curtailment compliance updates in accordance with r55. All large consumers are directly linked to the SCADA system and hence real time gas usage can be monitored on-line.

All retailers apart from one supplied the TSOs with regular demand curtailment compliance updates in accordance with r55. The quality and format of compliance reporting from retailers varied significantly. Most compliance reports did not report the number of consumers who had curtailed demand as required by r55 (2) (d). The inconsistency of the information supplied by retailers did not materially affect the transmission system performance during the critical contingency or any of the decisions taken by the CCO. It should be noted that the processes and procedures for retailers and large consumers' compliance updates is currently being reviewed and improved. The experience during this incident confirms this need.

6. Level Of General Compliance By Consumers With Retailers Directions

General compliance levels by consumers with retailer directions appeared to be very good. This is borne out by the significantly reduced demand levels observed on the system during the critical contingency.

The CCO received a retailer report that some consumers had refused to curtail or did not specifically respond positively when instructed to curtail.

7. Other Observations

During the critical contingency retailers re-designated thirty three consumers into band 5 – essential service providers. These re-designations were forwarded to the CCO to consider if demand could be restored to these consumers. The CCO considered these re-designations on a case-by-case basis and released restoration to each one under the revised curtailment direction issued by the CCO at 09:45 on 26 October 2011. This indicates that deficiencies may exist in the process for designating consumers as essential service providers.