ESSENTIAL SERVICES COMMISSION

WATER PERFORMANCE REPORT

Performance overview of Victorian urban water and sewerage businesses

2008-09 to 2012-13

December 2013

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PERFORMANCE OVERVIEW — 2008-09 TO 2012-13

INTRODUCTION

This paper provides an overview of the performance of the Victorian urban water industry across the second regulatory period[1], based on annual performance data provided and independently verified for the 13 regional businesses, three metropolitan retailers and Melbourne Water. Where statewide averages are discussed, a weighted average is calculated where appropriate to reflect the size of the various water businesses and their relative contribution to the overall average.

PERIOD OVERVIEW

The second regulatory period spanned a very difficult and challenging time for the Victorian water industry, which experienced both extremes of weather. The period began in 2008 with the entire state deep in the throes of the 'Millennium Drought'; there were widespread water supply shortages and various levels of water restrictions in place. Water conservation was paramount, and the main message to customers was to minimise water use and to seek alternate sources wherever possible. When the drought finally broke in 2010, it was promptly followed by a series of major floods and the wettest Victorian summer on record. Although replenishing near-exhausted water supply systems across the state, the weather brought a fresh set of challenges to the water industry.

[1] The second regulatory period for Victorian water businesses began in 2008-09 for the regional businesses and 2009-10 for the metropolitan Melbourne businesses. It ended in 2012-13, with the third regulatory period commencing on 1 July 2013.

The final two years of the period produced much more typical weather conditions. Water restrictions were eased or removed, and water businesses focused on normal operations and service provision.

These extremes in weather significantly affected the performance of the Victorian water businesses across many of the key reporting indicators. In addition, the prolonged drought necessitated heavy capital investment to secure alternate water supplies for customers, as well as increased operational costs to combat the drought's ongoing effects. These increased costs produced a very significant increase in the revenue required to operate the businesses, with all water businesses significantly increasing prices across the period to recover this additional revenue.

The Commission's price determinations for the second regulatory period scheduled progressive price increases for all businesses across the period, to moderate the effects on customers. Typical average annual household customer bills for each business which were $450-$750 at the end of the first regulatory pricing period in 2007-08 increased to around $850-$1250 in 2012-13. For the third regulatory period, scheduled annual price increases for most businesses will account for inflation only. The metropolitan Melbourne retailers and Western Water had significant price rises in 2013-14 as a result of the increased costs associated with the Victorian desalination plant.

PERFORMANCE OVERVIEW

During the second regulatory period, Victorian water businesses generally maintained or improved the standard of service for customers, despite the significant challenges presented by the extreme weather variation.

Overall water service reliability remained relatively steady while sewer reliability improved. Most businesses consistently delivered water that met the Safe Drinking Water Regulations 2005, with the 2011 floods causing the main quality issue. Customer complaints for drinking water quality were fairly steady over the period.

Businesses continued to reduce their environmental impact, with reductions in CO_2-e emissions, and an increase in reuse of biosolids generated at waste water treatment plants. Reuse of treated effluent varied with customer demand, which depended on rainfall patterns; it peaked at the height of the drought, and fell during the very wet years.

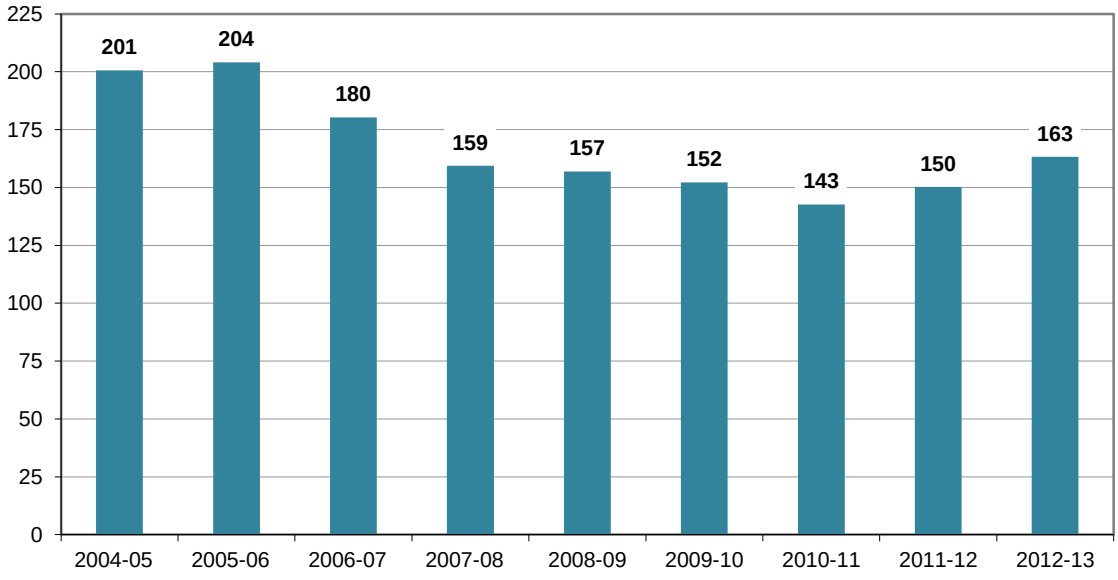
Despite price increases, fewer residential customers had their water supply restricted for nonpayment of bills (down by 20 per cent over the period). Likewise, legal actions for nonpayment reduced while the average debt level at the time of initiating action increased. The rate of residential customers on instalment plans increased, as did the number of hardship grants the water businesses approved; the total value of hardship grants more than doubled across the period.

Water businesses' investments in water supply augmentation projects during the drought have improved security against future droughts.

HOUSEHOLD CONSUMPTION

Over the second regulatory period, average annual household water consumption across Victoria varied significantly. It was subdued by drought-related supply restrictions at the beginning of the period and extreme rainfall events in 2010-11, when it was at its lowest (143 kilolitres per household). Since then, average household consumption increased to 163 kilolitres per household in 2012-13, influenced by relatively warmer summers and more traditional rainfall patterns. However, consumption is still below historical levels prior to the millennium drought (figure 1).

FIGURE 1 STATEWIDE AVERAGE ANNUAL HOUSEHOLD CONSUMPTION
(kilolitres per household)



HOUSEHOLD BILLS

The Commission uses each business's average household consumption to calculate an indicative average household bill for water and sewerage services. This includes both the fixed and variable water and sewerage charges. Average annual household bills increased considerably across the second regulatory period. In 2008-09, average bills ranged from $520 (South East Water) to $881 (Central Highlands Water) (table 1). By 2012-13, average bills ranged from $832 (Lower Murray Water) to $1261 (Gippsland Water). This reflected the businesses' increased spending on water supply augmentation during the prolonged 'Millennium Drought' and the severe water shortages experienced at the beginning of the regulatory period.

TABLE 1 OWNER OCCUPIERS — AVERAGE HOUSEHOLD BILLS
($, nominal)

	2008-09	2009-10	2010-11	2011-12	2012-13
City West	527	597	687	791	848
South East	520	619	722	829	857
Yarra Valley	553	649	763	910	953
Barwon	692	778	843	953	1 066
Central Highlands	881	951	1 007	1 096	1 169
Coliban	662	778	877	966	1 064
East Gippsland	805	878	932	1 017	1 135
Gippsland	847	1 049	1 098	1 185	1 261
Goulburn Valley	600	654	662	759	864
GWMWater	852	941	947	1 096	1 211
Lower Murray	658	719	691	770	832
North East	623	717	735	804	922
South Gippsland	824	868	906	958	1 003
Wannon	743	830	902	1 044	1 148
Western	759	812	865	956	977
Westernport	816	883	929	988	1 041

Note: Average household bills are in that year's dollars, and calculated using that year's average consumption levels for each business.

DEALING WITH HARDSHIP

As household bills increased during the second regulatory period, businesses focused on financial hardship support and payment management. Extensive flooding in 2010-11 also saw a number of affected businesses cease debt collection measures for customers experiencing difficulties.

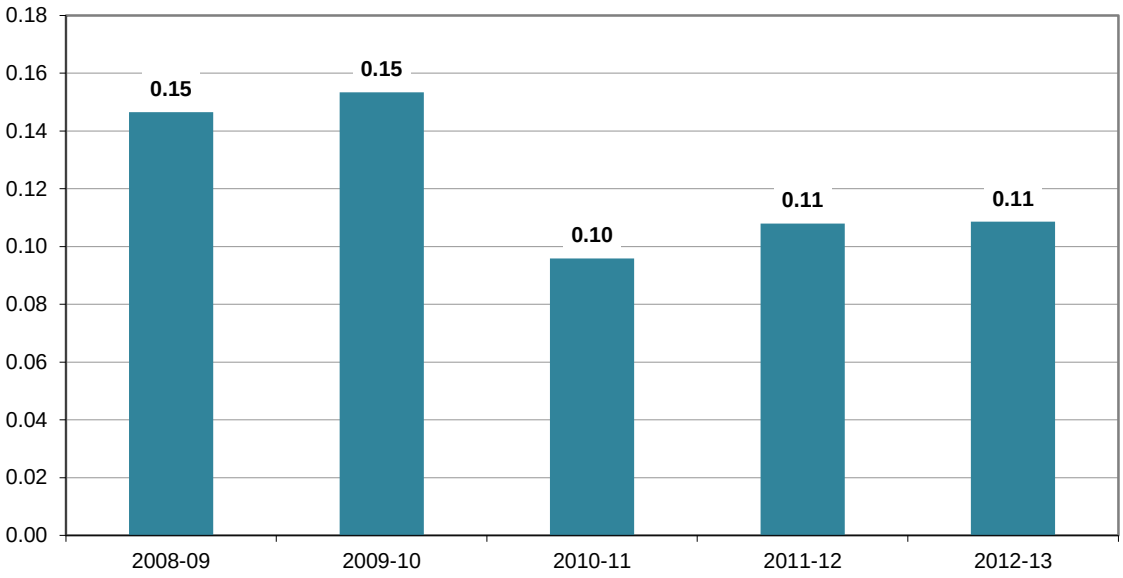
The use of instalment plans for residential customers increased over the second regulatory period, as prices increased, from 5.6 per 100 customers in 2008-09 to 6.3 in 2012-13.

The number of residential customers whose water supply was restricted for nonpayment of bills decreased by 20 per cent over the period, from 3033 in 2008-09 to 2439 in 2012-13 (figure 2). The lowest rate of residential restrictions was 2068 in 2010-11, when several flood affected businesses did not restrict customers' supply.

Legal actions against residential customers decreased from a high of 939 in 2008-09 to a low of 661 in 2010-11, before increasing again to 811 in 2012-13 (when debt collection activities resumed after the floods). The average debt level before initiating legal proceedings increased over the period, and was well above the minimum of $200 set out in the Customer Service Code.

Over the second regulatory period, the number of hardship grants approved increased to a high of 17 948 grants in 2011-12, from 10 931 grants in 2008-09, before dropping to 14 416 grants in 2012-13. However, the total value of hardship grants increased steadily, more than doubling over the period from $1.1 million in 2008-09 to $2.5 million in 2012-13.

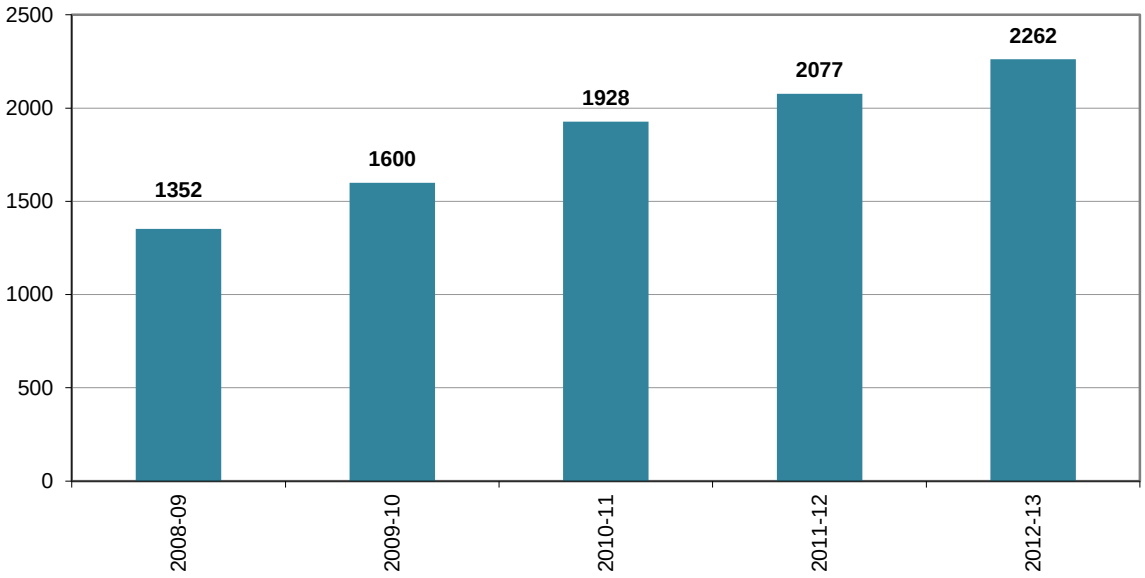
FIGURE 2 RESIDENTIAL SUPPLY RESTRICTIONS FOR NONPAYMENT OF BILLS
(per 100 customers)



CUSTOMER COMPLAINTS

Across the second regulatory period, the number of cases that the Energy and Water Ombudsman (Victoria) (EWOV) received increased from 1352 in 2008-09 to 2262 in 2012-13, an increase of 67 per cent (figure 3). Billing issues made up the majority of EWOV cases over the period.

FIGURE 3 EWOV CASES – ALL BUSINESSES
(total cases)



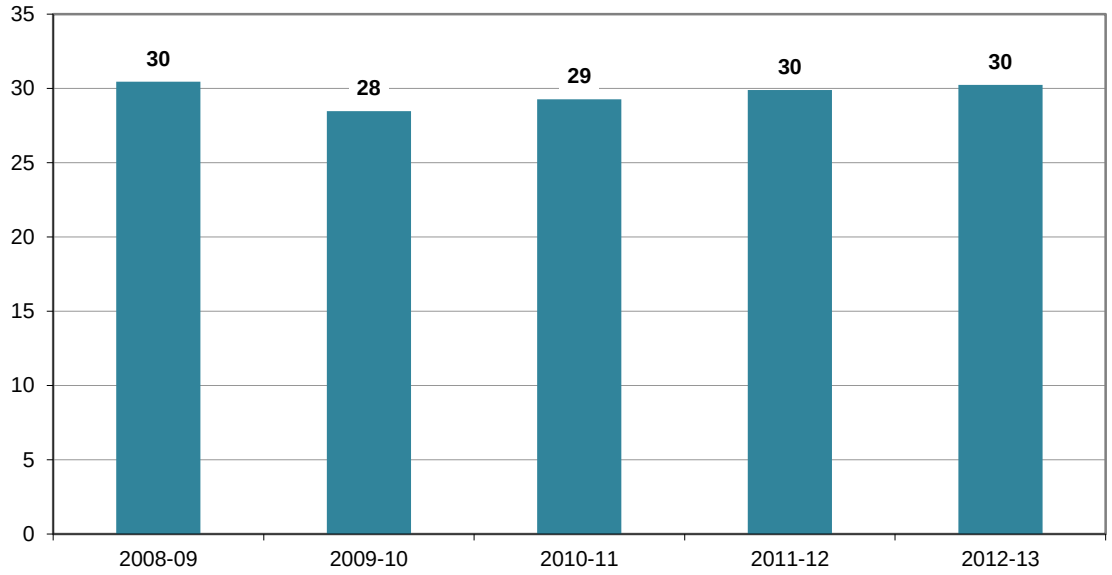
Data source: EWOV

Customer complaints received by the businesses increased steadily across the period, with state wide total complaints rising from 12 774 in 2008-09 to 18 202 in 2012-13 (up 42 per cent). This equates to an increase from 0.56 complaints per 100 customers to 0.74. The increase was driven mainly by payment issues.

NETWORK RELIABILITY

Overall water supply reliability across the state, measured by average customer minutes off supply, was steady between 28 and 30 minutes over the second regulatory period (figure 4).

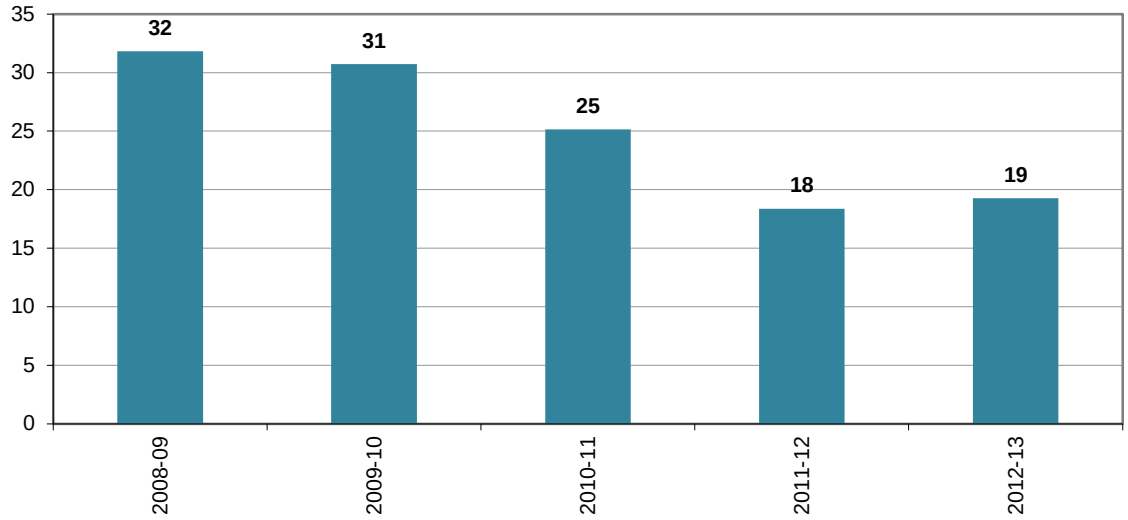
FIGURE 4 STATEWIDE AVERAGE CUSTOMER MINUTES OFF SUPPLY
(minutes)



The rate of interruptions to water supply varied across the period, decreasing from 42 interruptions per 100 kilometres of water main in 2008-09 to 36 interruptions in 2010-11 and 2011-12 then increasing to 39 interruptions in 2012-13.

The rate of sewer blockages improved steadily across the period, from 32 blockages per 100 kilometres of sewer main in 2008-09 to 19 in 2012-13 (figure 5). This generally reflected the change from drought conditions, when sewer blockage rates increase as tree roots enter the sewers seeking water, and soils dry out and shrink.

FIGURE 5 STATEWIDE SEWER BLOCKAGES
(per 100 kilometres of sewer main)



Similarly, the rate of sewer spills also improved across the period, from 15 per 100 kilometres of sewer main in 2008-09 to 10 in 2012-13.

WATER QUALITY

Across the second regulatory period, 11 of the 16 urban water businesses consistently delivered water to customers that met *E. coli* bacteriological requirements set out in the Safe Drinking Water Regulations 2005. Central Highlands Water and Coliban Water each reported noncompliances in two years, and Gippsland Water, GWMWater and Wannon Water each reported noncompliances in one year.

Most urban businesses consistently delivered water that met the turbidity requirements set out in the Safe Drinking Water Regulations across the period. GWMWater reported noncompliances in each year of the period[2], while Yarra Valley Water and Westernport Water reported noncompliances in 2008-09 only.

Across the period, water quality complaints ranged from a rate of 0.26 complaints per 100 customers in 2010-11, to 0.29 in both 2009-10 and 2012-13.

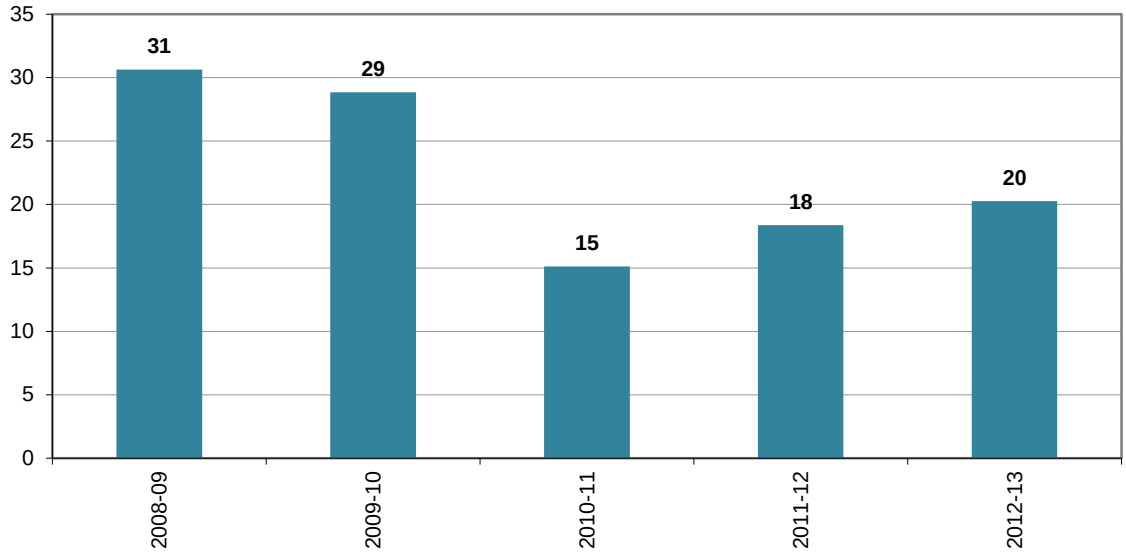
ENVIRONMENTAL PERFORMANCE

The total volume of sewage treated in Victoria increased across the period. It rose from 401 000 megalitres in 2008-09 to a peak of 497 000 megalitres in 2010-11 (impacted by stormwater entering the sewer systems), before falling to 479 700 megalitres in 2012-13. The proportion of sewage treated to a tertiary level increased from 12 per cent in 2008-09 to 35 per cent in 2012-13, due mainly to a major upgrade to Melbourne Water's Eastern Treatment Plant.

The proportion of total effluent produced in Victoria that was reused varied across the period, from a high of 31 per cent at the height of the drought in 2008-09, to a low of 15 per cent during a year of high rainfall in 2010-11 (figure 6). It increased slightly to 20 per cent in 2012-13. Following a similar pattern, total effluent reuse decreased across the period with a high of 115 600 megalitres in 2008-09 to a low of 75 000 megalitres in 2010-11, before rising to 91 400 megalitres in 2012-13.

[2] Very fine silt was washed into GWMWater's reservoirs during extreme rain events in 2010-11 and the January 2011 flooding, significantly affecting GWMWater's turbidity levels in 2010-11 and subsequent years.

FIGURE 6 STATEWIDE PROPORTION OF EFFLUENT REUSED
(per cent)



Total net carbon dioxide equivalent (CO_2-e) emissions reported by Victorian urban water businesses reduced by 11 per cent across the period, from 862 198 tonnes in 2008-09 to 765 262 tonnes in 20012-13.

MAJOR PROJECTS

The total capital expenditure across the second regulatory period was $9.1 billion (in $2012-13), comprising $4.1 billion on water, $3.8 billion on sewerage, $0.4 billion on recycled water and, for Melbourne Water, $0.7 billion on waterways and drainage.

Businesses identified 120 major projects to be completed during this regulatory period (table 2). However, only 83 projects were reported as completed — 48 projects (40 per cent) were completed on or ahead of schedule, with 35 (29 per cent) completed anywhere from one to four years late. A further 18 projects have started and will continue into the third regulatory period. Fourteen projects were deferred into the third regulatory period or beyond, and five projects were cancelled or suspended indefinitely as needs and priorities changed.

TABLE 2 SUMMARY OF MAJOR PROJECTS — REGULATORY PERIOD 2
(2008-09 to 2012-13)

	Major projects in RP2	Completed on time	Completed late	Underway rolled into RP3 period	Deferred to RP3 or beyond	Cancelled or suspended indefinitely
Melbourne Water	8	7	1			
City West	6	1	1	1	3	
South East	6	3	2	1		
Yarra Valley	5	2	2		1	
Barwon	7	5	1	1		
Central Highlands	6	4	1	1		
Coliban	10	5	4	1		
East Gippsland	5	2	2		1	
Gippsland	7	2	2	3		
Goulburn Valley	3	2	1			
GWMWater	12	4	4	3		1
Lower Murray	6		4		2	
North East	10	2	4	3		1
South Gippsland	7	1	1	2	3	
Wannon	10	5	2	2	1	
Western	4	2	2			
Westernport	8	1	1		3	3
TOTAL	**120**	**48**	**35**	**18**	**14**	**5**

The finance costs for these scheduled projects were included in customer prices for the second regulatory period. The Commission made adjustments at the start of the third regulatory period to reflect the actual capital expenditure during the second period.