# RCAs submitted for FY2014/15, FY 2015/16 and FY 2016/17

NERSA Public Hearings
April 2018

# The Regulatory Clearing Account (RCA) is the regulatory mechanism for risk management

Eskom

*RCA is a balancing mechanism between what was awarded by NERSA on the basis of a forecast (MYPD), and what actually materialised (Eskom's audited financial statements) - a backward looking reconciliation*

## NERSA Framework

1. Differences materialise if Eskom either does not achieve or exceeds the awarded revenue (due to pricing or demand factors), or incurs costs greater or lower than those which were taken into account when NERSA calculated the MYPD allowable revenue
2. RCA balance could either be in favour of Eskom or consumer
3. RCA is subject to approval by the Regulator
4. Liquidation of the RCA as approved by the regulator may result in an increase or decrease in future electricity prices
5. The MYPD Methodology as published by NERSA in December 2012 is applicable to the MYPD3 control period

## Eskom application

1. Eskom has submitted 3 RCAs for years 2 to 4 to be adjudicated
2. Applications were made based on the 2013/14 RCA determination and principles applied by Nersa
3. RCA application **not** a revenue application based on future estimates
4. The RCA is not a response to the price increase 5.23% for FY2018/19
5. Eskom is not expecting a once off price adjustment for the 3 RCAs

***The RCA is a globally accepted regulatory principle and is part of RCA best practices; MYPD2 RCA decision made in 2014 and MYPD3 RCA Year 1 (2013/14) made in 2016***

# Principles from RCA 2013/14 decision made on 1 March 2016

1. Allowed revenue is computed on at Eskom Company level and based on billed revenue

2. Gas turbines variances limited to amounts allowed by NERSA and additional volumes recouped at average variable costs for coal

3. International purchases treated as cross border IPPs

4. Over expenditure of operating costs are absorbed by Eskom and is not allowed to be recovered

# Summary of the RCAs for Year 2-4 of MYPD3

***The Constitution Court ruling of August 2017 has cleared the way for Nersa to process the 3 outstanding RCAs which total over R66 billion***

| RCA for 2016/17 (RM) | RCA 2014/15 | RCA 2015/16 | RCA 2016/17 | Total RCAs Years 2-4 | % contribution |
|---|---|---|---|---|---|
| Revenue | 8 787 | 15 578 | 20 016 | 44 382 | **67%** |
| Independent Power Producers | 4 346 | 620 | 2 452 | 7 418 | **11%** |
| International Purchases | 3 299 | 3 567 | 2 283 | 9 149 | **14%** |
| Coal | 574 | 3 258 | -359 | 3 473 | **5%** |
| Open Cycle Gas Turbines (OCGTs) | 1 944 | 689 | -1 259 | 1 374 | **2%** |
| Other Primary Energy | 1 355 | 728 | 722 | 2 805 | **4%** |
| Environmental Levy | -683 | -1 180 | -1 404 | -3 267 | **-5%** |
| **Subtotal** | **19 622** | **23 261** | **22 451** | **65 334** | |
| Other | -437 | 372 | 1 418 | 1 353 | **2%** |
| **RCA balance** | **19 185** | **23 633** | **23 869** | **66 687** | **100%** |

***Revenue alone contributes to 67% of the RCAs over the 3 years***

# Revenue variance - NERSA decision in RCA for MYPD 3 – Year 1

| NERSA decision | Eskom considerations in RCA calculation |
|---|---|

**NERSA decision**

- NERSA allowed for variance in domestic sales
- NERSA considered international sales with a gross approach as opposed to the net position
- NERSA excluded internal sales revenue
- NERSA deducted revenue related to load shedding and curtailment

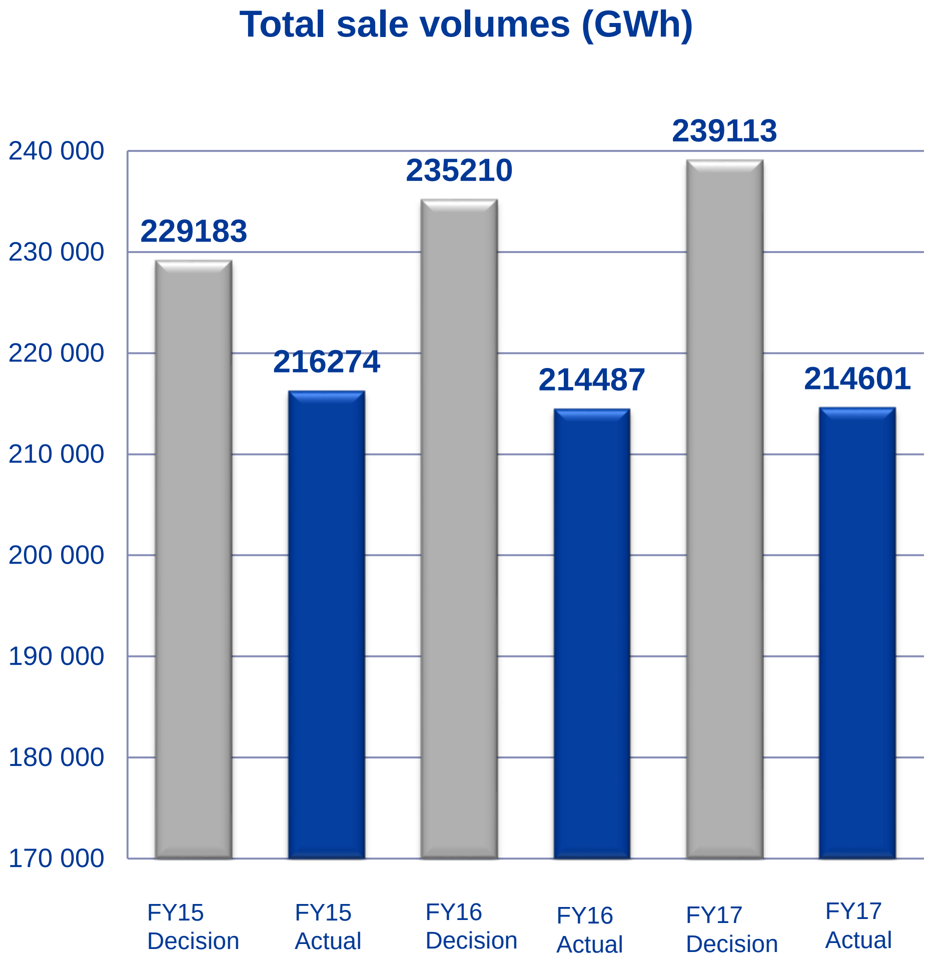
**Eskom considerations in RCA calculation**

Eskom used the precedent set by NERSA in RCA year 1 of MYPD 3 period for subsequent applications for years 2, 3, and 4

- Eskom applied for variance in domestic sales
- Eskom considered international sales with a gross approach as opposed to the net position
- Eskom excluded internal sales revenue
- Eskom deducted revenue related to load shedding and curtailment

***Eskom ensured that precedent set in Nersa decision RCA year 1 is applied in years 2, 3 and 4***

# Revenue Variance attributable to lower sales volumes




**MYPD Methodology**[1]

- Allows for **revenue adjustments** attributable to **volume and mix changes**

**Reasons for RCA amount**

- Lower sales volume from standard tariff customers –

  Drop in volumes due to various factors including
  - Downturn in economy
  - Lower investor confidence
  - Decrease in reliance on Eskom
  - Commodity price changes
  - Elements of price elasticity
- Higher sales from export sales contributed positively to the total revenue
- Load shedding impacts in FY2015 is adjusted in the revenue variance

1 Source: Clause 14.1.5 NERSA MYPD Methodology – Final- for publication 5 December 2012

# International Purchases – MYPD 3 Year 1 Decision

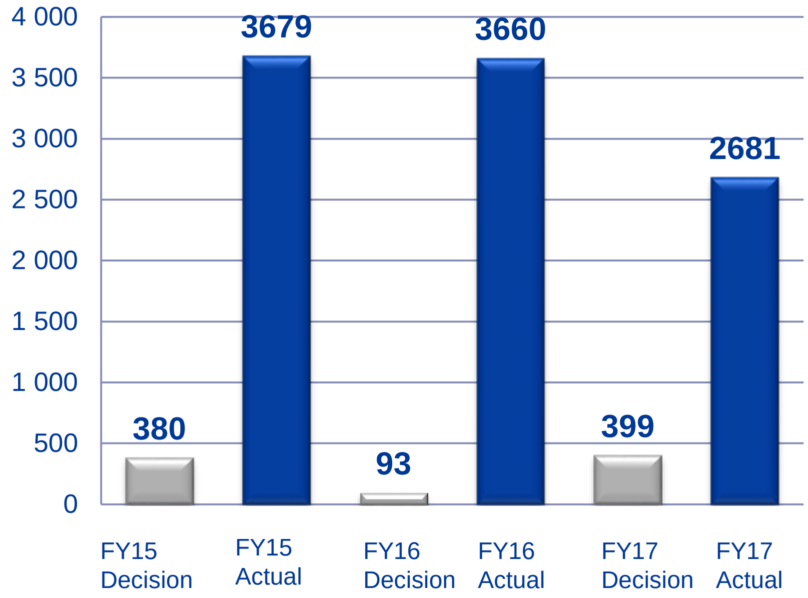
## NERSA decision

- Nersa made a decision on international purchases and sales from a gross position as opposed to a net position in the MYPD 3 decision
- Nersa treated international purchases as cross border IPPs
- Nersa decision was to allow the variance of R1 136 million with regards to regional IPP costs in the MYPD 3 Year 1 RCA decision

***Eskom maintained NERSA decision for MYPD 3 year 1 in RCA applications for MYPD 3 years 2, 3 and 4***

# International purchases represents cross border IPPs and is passed through to consumer

**International purchase costs (R'm)**




## MYPD Methodology

- International purchases represents cross border IPPs
- International purchases are match with international revenue
- Variance is recovered as is treated as IPPs
- Revenue variance takes extra inflows into RCA

## MYPD3 RCA decision for 2013/14

- Accounted for revenue on a total basis which included export revenues
- Thus the equivalent approach was applied to purchase costs and the full international purchases was allowed for RCA 2013/14

***The revenue determination for 2018/19 further reinforced this principle to incorporate the full international purchases in the primary energy costs***

# NERSA decision IPP costs in MYPD 3 year 1 RCA

## NERSA decision in MYPD 3 Year 1 RCA

- Extract below summarises NERSA decision

> *Independent Power Producers (IPPs)*
>
> *49. The Independent Power Producers (IPPs) costs were based on approved Power Purchase Agreements (PPA) contracts submitted by Eskom*
>
> *50. Therefore Eskom is allowed the variance of R580m with regard to IPP costs in its favour.*

***Eskom maintained NERSA decision for MYPD 3 year 1 in RCA applications for MYPD 3 years 2, 3 and 4***

# IPPs of R7.417 billion will be a pass-through cost for years 2-4 of the RCA for MYPD 3

- Variance of R7.674 billion for STPPP, R1.843 billion for Municipalities, R223 million for WEPs and R63 million for MTPPP (benefit to Eskom)
- Renewable IPP projects variance of **R423 million** (benefit to consumer)
- DOE Peaker projects were **variance of R1.205 billion** (benefit to consumer)
- Transmission ancilliary/network costs were **variance of R758 million** (benefit to consumer)
- Total IPPs reflects a net variance of R7.417 billion between years 2-4 (benefit to Eskom)

| **MYPD 3 Variance Decision - IPPs (Actuals)** | **RCA 2014/15** | **RCA 2015/16** | **RCA 2016/17** | **Total RCAs Years 2-4** |
|---|---|---|---|---|
| MYPD 3 Variance | 4 346 | 620 | 2 451 | 7 417 |
| Renewables | 2 442 | -2 061 | -804 | -423 |
| DOE Peakers | | -605 | -600 | -1 205 |
| MTPPP | -30 | 56 | 37 | 63 |
| STPPP | 2 132 | 2 682 | 2 860 | 7 674 |
| Municipalities | | 858 | 985 | 1 843 |
| WEPS | 75 | 78 | 70 | 223 |
| Tx Ancilliary costs/ Network costs | -273 | -388 | -97 | -758 |
| **Cumulative variance** | **4 346** | **4 966** | **7 417** | |

# NERSA decision on coal burn variance in MYPD 3 year 1 RCA

## NERSA decision in MYPD 3 Year 1 RCA

- NERSA applied the Performance Based Regulation (PBR) formula as outlined in the MYPD3 Methodology for the coal burn variance
- Extract below is the NERSA decision

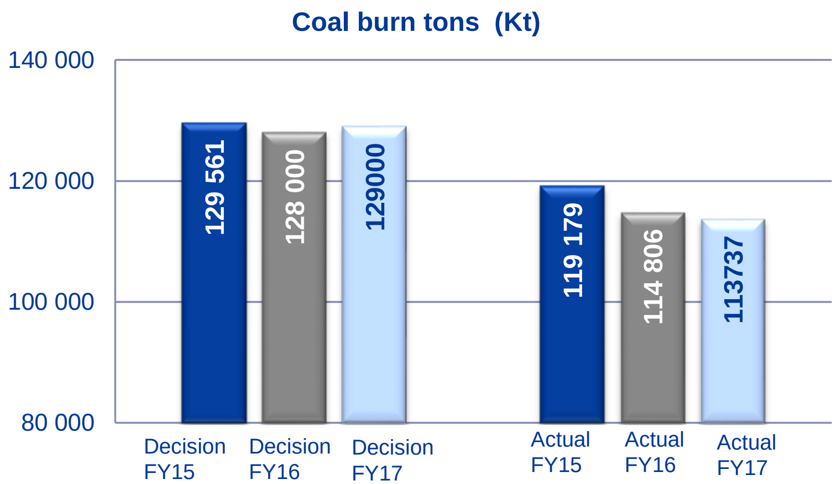
*The R2 000m coal burn cost is allowed in favour of Eskom*

***Eskom maintained NERSA decision for MYPD 3 year 1 in RCA applications for MYPD 3 years 2, 3 and 4***

# Coal burn variance reflects a price element which is partially offset by the volume variance

Eskom

## Coal Burn tons and energy produced




## Coal burn variance included in RCA

| Coal burn variance | unit | RCA 14/15 | RCA 15/16 | RCA 16/17 |
|---|---|---|---|---|
| Coal burn price variance | R'm | 3 814 | 8 211 | 5 530 |
| Coal burn volume variance | R'm | -3 240 | -4 953 | -5 889 |
| Coal burn costs incl in RCA | R'm | **574** | **3 258** | **-359** |

## MYPD Methodology[1]

- **Performance Based Regulation (PBR) formula**
  - Compares **burn costs** between decision and actuals
  - Variance is **shared between customers** and Eskom
  - Sharing **percentage** is determined by NERSA
- The **PBR pass-through** cost consists of a **price and volume variance**

## Reasons for RCA amount

- **Nersa allowed benchmark coal R/Ton was lower than Eskom's actual cost at that time**
- **Lower production** from cheaper **Cost Plus and Fixed Price mines.**
- **Procurement of additional short/medium term coal resulting in transport of coal** via road and rail instead of coal over a conveyor belt from long term contracts.
- **Favourable volume variances** passed onto consumer

1 Source: Clause 14.1.5 NERSA MYPD Methodology – Final- for publication 5 December 2012

# NERSA decision – OCGT variance in MYPD 3 Year 1

## NERSA decision in MYPD 3 Year 1 RCA

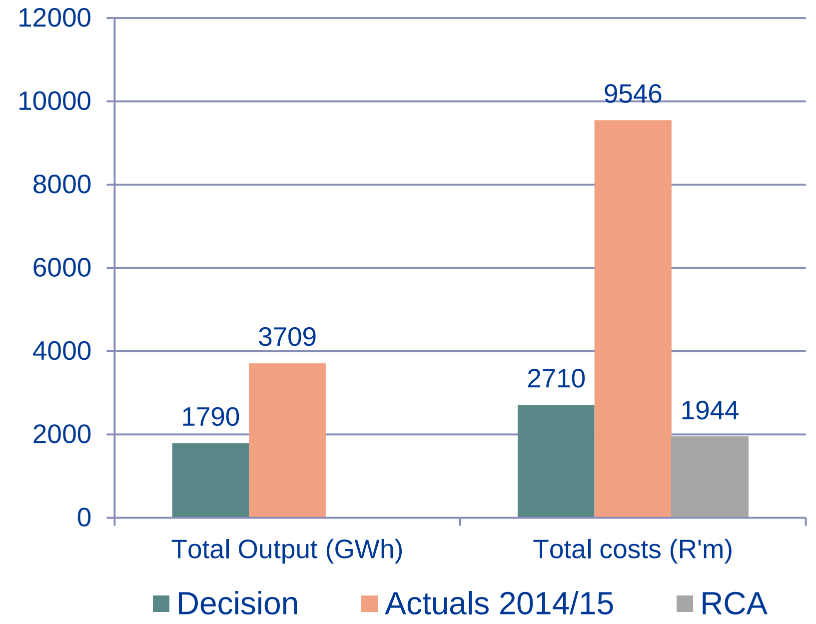
- **OCGT Volume variance**
  - OCGT volume variance of 2 564GWh from OCGTs over and above the MYPD3 allowed volumes
  - Allowed at next available least cost option (coal-fired power stations at 26.3c/kWh)
  - Allowed for the additional 2 564GWh is R674m in favour of Eskom.
- **OCGT Price variance**
  - Eskom to pass-through all variances due to fuel price up to allowed fuel volumes
  - Actual average price was 9.19R/L,  higher than allowed average unit price of 7.49R/L
  - Eskom is therefore allowed a fuel price variance of R578m.

***Eskom maintained NERSA decision for MYPD 3 year 1 in RCA applications for MYPD 3 years 2, 3 and 4***

- ***The coal cost equivalent for volumes above decision volumes applied for***
- ***Price variance applied for***

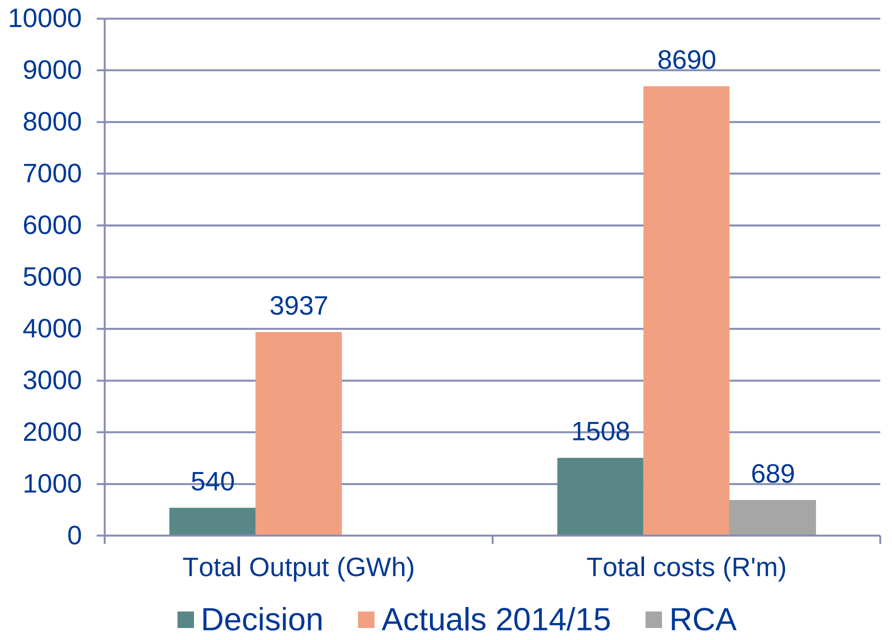
# OCGT usage and costs exceeded the MYPD3 allowances in FY14/15 & FY15/16. However the RCA claim was limited based on the decision taken for 2013/14 RCA. Eskom absorbed R11.4bn to its bottom line

## OCGTs analysis for 2014/15




- Actual cost over expenditure was R6836 million but the RCA claim was limited to R1944million. Thus **Eskom absorbed** the difference of **R4892 million** to its bottom-line
- Allowed OCGTs volumes was 1056 GWh plus a special allowance for the 3 months for Jan15 to Mar15 which added another 734GWh. Special allowance was to limit the impact of load shedding

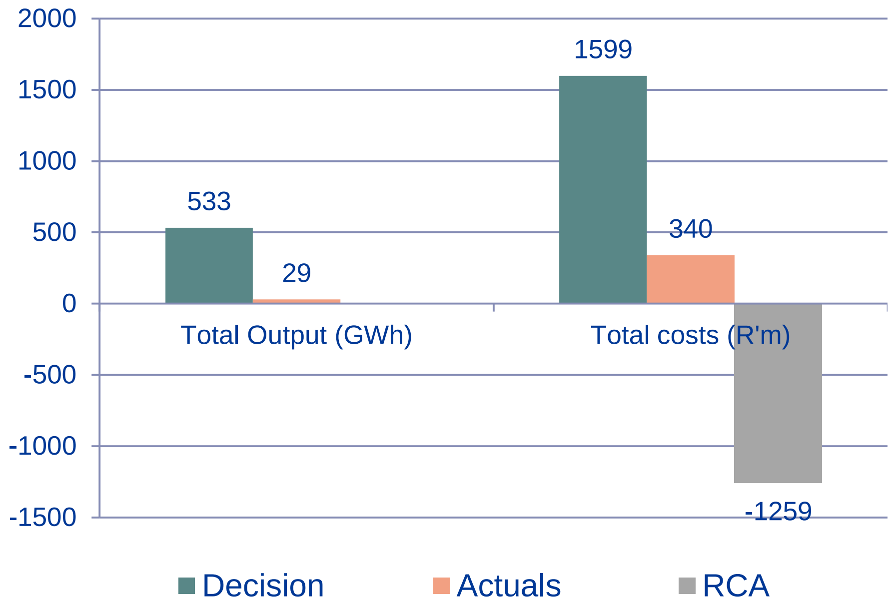
## OCGTs analysis for 2015/16




- Actual cost over expenditure was R7182 million but the RCA claim was limited to R689million. Thus **Eskom absorbed** the difference of **R6493 million** to its bottom-line

# OCGT usage and costs were lower in 2016/17 resulting in a claw back of R1259 million

## OCGTs analysis for 2016/17




## MYPD3 RCA 2013/14 decision and principle applied

- OCGT cost variances limited to amounts allowed by NERSA and additional volumes recouped at average variable costs for coal
- The above principle has been applied to the 3 RCA submissions

## Reasons for RCA amount

- Due to the improvement in fleet performance and the commissioning of new capacity, lower OCGT volumes of 29GWh were required in 2016/17 compared to the allowance of 533GWh
- The under expenditure of R1259 million is then for the benefit of the consumer

# Other primary energy for RCAs

## Breakdown of other primary energy components

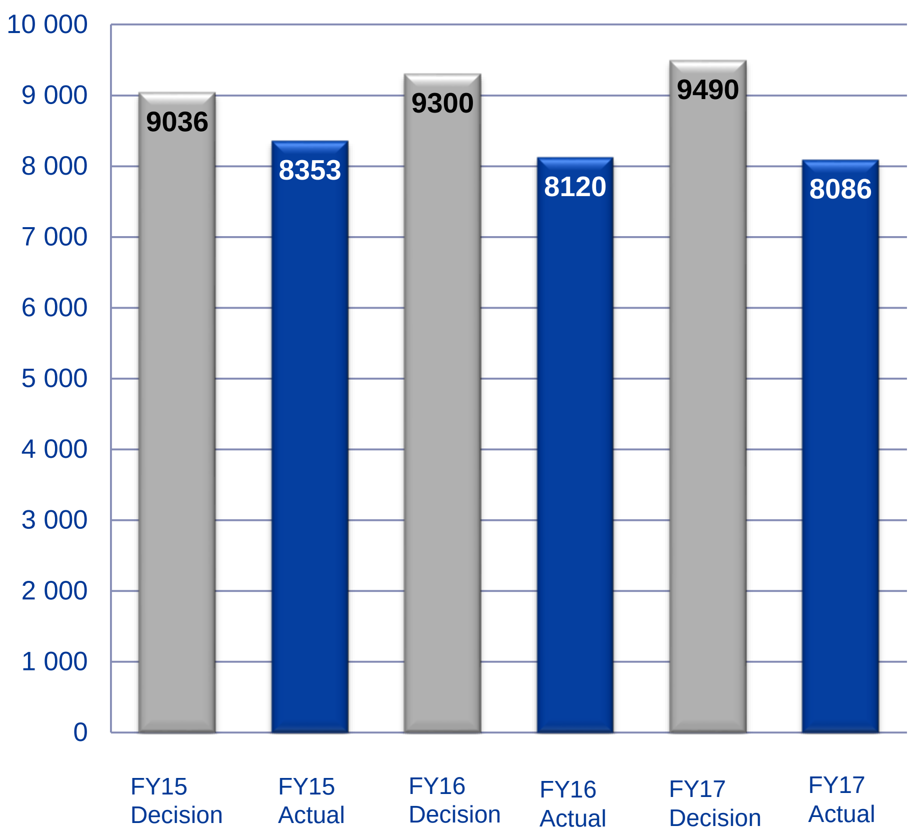
| Other Primary Energy (R'm) | 2014/15 | 2015/16 | 2016/17 | Total |
|---|---|---|---|---|
| Water | -502 | -428 | -437 | -1367 |
| Start-up gas & oil | 1 064 | 657 | 532 | 2 253 |
| Coal handling | 580 | 542 | 501 | 1 623 |
| Water treatment | 119 | 84 | 125 | 328 |
| Nuclear | 180 | 59 | 281 | 520 |
| Fuel procurement | -86 | -131 | -141 | -358 |
| Sorbent usage | | -55 | -139 | -194 |
| **Total Other Primary Energy** | **1 355** | **728** | **722** | **2 805** |

## Drivers to other primary energy in the RCAs

- **Start up gas -** higher number of start ups are driven by the number of outages and trips
- **Coal handling -** additional costs incurred due to more coal having been reclaimed from the strategic to the seasonal stockpiles at the stations than anticipated
- **Water treatment**– more usage of chemicals due to poor water quality
- **Nuclear fuel -** due higher rates than assumed in decision
- **Water** – lower costs incurred due to actual costing rates being lower
- **Fuel Procurement** – lower due to delay in projects
- **Sorbent usage –** due to delay in FGD implementation

# Environmental levy was underspent due to lower sales and therefore lower production

## Environmental levy (R'm)




### MYPD Methodology[1]

- Allows for taxes and levies as a pass through

### Reasons for RCA amount

- Environmental levy reflects a clawback in favour of the consumer
- Attributable to lower production levels linked to the lower sales volumes in actual mode
- Environmental levy rate is pass through to consumer

1 Source: Clause 14.1.5 NERSA MYPD Methodology – Final- for publication 5 December 2012

# Other categories contributing to the RCAs

## Breakdown of Other categories

| Other categories (R'm) | 2014/15 | 2015/16 | 2016/17 | Total |
|---|---|---|---|---|
| Capital Expenditure (CECA) | 91 | 332 | 636 | 1 059 |
| EEDSM | -149 | -368 | - | -517 |
| Service Quality Incentives (SQI) | 236 | 318 | 343 | 897 |
| Inflation | 209 | -152 | 162 | 219 |
| Other income | -528 | -152 | - | -662 |
| **Total other categories** | **-141** | **-4** | **1141** | **996** |

## Drivers to other categories in the RCAs

- **EEDSM –** lower achievement due to delays in project executions and strategy has been revised
- **SQI –** Distribution and Transmission networks have performed well over the period
- **Capital Expenditure (CECA)** – amounts claimed as a result of variance in return on assets due to variance in capital expenditure being incurred when compared to assumption in MYPD3 decision.
- **Inflation –** Operating costs per the MYPD3 decision adjusted for change in CPI
- **Other Income** – Amount of other income adjusted based on RCA2014 decision principles

# In summary Eskom's RCA applications are within the ambit of the MYPD 3 methodology and the precedent set in MYPD 3 year 1 RCA

- Eskom has submitted the RCAs for years 2,3 and 4 of MYPD3 based on:
  - MYPD3 regulatory methodology
  - Decision and principles of the RCA 2013/14 decision
- The application is based on audited financials at Eskom company level
- Eskom is requesting the revenue variance which contributes 67% (R44bn)
- IPPs contribute 11% (R7.4bn) and cross border purchases 14% (R9.1bn)
- Coal costs adds 5% (R3.5bn); OCGTs 2% (R1.4bn) and other primary 4% (R2.8bn) and Other items 2% (R1.4bn)
- Environmental levy is clawed back by 5% (R3.3bn)
- Eskom has absorbed operating costs of R33.8bn as higher expenditure is not allowed to be claimed through the RCA under the current MYPD methodology
- Eskom has also absorbed the OCGTs costs of R11.4bn above MYPD3 levels which exceed the coal cost compensation
- Eskom is aware that the RCA Balance of R66bn will not be liquidated once off and is likely to be phased.

***The phasing of the liquidation of the RCAs needs to take Eskom's financial sustainability into consideration***

Thank you