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Stakeholder Comments on Eskom Regulatory Clearing Account (RCA) Applications

Eskom RCA application for Financial Year (FY) 1415

Eskom for FY 1415 applied for an RCA balance of R19 185m in its favor. As outlined in table 1 below the RCA balance for FY1415 can at best be R13 064m in Eskom's favor.

Table 1: Summary of estimated RCA balance for FY1415

Eskom 201415						
		Allowed	Actual	Variance	Adjustment	RCA (R'm)
1	Revenue Variance	156 057	147 691	8 366		8 366
2	Coal	36 617	37 376	759	-1 869	-1 110
	Price Variance			3 696	-1 869	1 827
	Volume variance			-2 937	-	-2 937
3	OCGT	2 710	9 546	6 836,00	-5 102	1 734
4	Other Primary Energy	5 535	6 890	1 355	-1 230	125
5	Local IPP & Cogeneration	5 108	9 454	4 346	-2 231	2 115
	DOE Peaking					
6	Import	380	3 679	3 299		3 299
7	Environmental levy	9 036	8 353	-683		-683
8	Nuclear decommission	-			83	83
9	DMP	688	309	-379		-379
	Total Primary Energy	60 074	75 607	15 533	-10 349	5 184
10	CECA	45 113	54 394	-9 281	91	91
11	IDM	953	654	-299		-299
12	Opex					-528
	Total RCA Balance					12 814
13	SQI					236
14	CPI Adjustment					209
						13 259

1. Revenue Variance

- a. Eskom was allowed total revenue from sale of electricity of R156 057m for FY1415. Eskom realised total actual revenue of R147 691m from sale of electricity. The other revenue and deferred income of R1 280m and R143m respectively are included in the calculation of the variance of R8 366m in Eskom's favor.

- b. The additional revenue streams are included as Eskom generates significant amounts of revenue for charging municipalities large amounts when “exceeding” their Notified Maximum Demand (NMD). While the intention of the NMD rules and associated penalty is to ensure effective load management by municipalities the manner in which the NMD charges are administered these charges simply seemingly amount to additional operational revenue and should for the purposes of the RCA be treated as such.

2. Coal Burn

- a. According to para. 3a on page 58 of 147 of the application Eskom was allowed coal burn of 129.561mt for R36 617m which translates into an average price of R282.60/ton.
- b. Eskom actual coal burn was 119.179mt for R45 195m however R7 819m according to the application were provisions only with respect to take of pay contracts for coal supply to Medupi and Kusile power plants. The amount of R7 819m is therefore disregarded for the purpose of the RCA balance. The actual total expenditure on coal burn was therefore reduced to R37 376m for the purposes of determining the appropriate RCA balance for coal burn. Eskom therefore overspent only R759m on the coal burn of R36 617m allowed for FY1415.
- c. Eskom was allowed 129.561Mt coal burn, it however due to lower customer demand burned only 119.179Mt which was lower by 10.39Mt or 8.02%. The coal volume variance which is the difference between actual volumes and allowed volumes multiplied by the allowed price amounted to R2 937m in favor of the customer; i.e. $(119.179 - 129.561) \times R282.60$. The variance is in favor of the customer as Eskom burned less coal than what was allowed.
- d. Eskom was allowed average coal price of R282.60/t at a total cost of R36 617m, it however paid R313.57/t for actual coal burned of 119.179Mt for a total amount R37 376m. Despite the fact that Eskom burned 8.02% less coal it paid 10.96% more and as a result exceeded the NERSA allowed budget for FY1415. In terms of the provisions of the MYPD methodology Eskom is allowed to pass-through the entire coal variance except for the alpha factor, in terms of which it has to absorb 5% of the actual cost per ton. In other words the actual cost of R313.57/t is reduced by the alpha factor to R297.89/t which is 95% of the actual cost per ton. The alpha adjusted price variance which is the difference between the alpha adjusted actual price (R/t) and the allowed price multiplied by actual volumes; i.e. $(R297.89 - R282.60) \times 119.179\text{mt}$ or R1 822.46m in favor of Eskom.
- e. The total actual alpha adjusted actual cost is therefore R35 502m whereas Eskom was allowed R36 617m for coal burn. The total alpha adjusted coal burn variance is therefore R1 115m in favor of the customer. The total alpha adjusted coal burn variance consist of an alpha adjusted price variance of R1 822.46 in favor of Eskom and a volume variance of R2 937.01m in favor of the customer.

3. OCGT

- a. Eskom as allowed R2 710m for OCGT, however it spent R9 546m and therefore claimed a variance of R6 836m in its favor as part of the RCA balance. According to page 80 of 147 of the application Eskom was subsequent to the MYPD3 decision allowed a further R1 669m for UCGT utilization. The OCGT RCA balance should therefore be limited to the additional R1 669m allowed to Eskom, the price variance of R300m $((8.15-8.10) \times 504\text{ML})$ in favor of customer and the compensation to Eskom for additional GWh generated by OCGT at the average marginal coal generation cost $(1303\text{GWh} \times 28\text{c/kWh})$. Eskom should therefore be allowed a total of R1 734m in its favor for FY14/15.
- b. According to p82 of 147 of the application the targeted Energy availability factor (AEF) for FY1415 was 81.83%. Eskom however achieved an AEF of only 73.73%, which was mainly driven by unavailability of the coal fleet as it accounts for the majority of Eskom generation capacity. The MPPD decision limited the use of OCGT due to the high declared availability of the Eskom coal fleet for which Eskom is compensated via appropriate depreciation and return on assets allowed as part of the MYPD3 decision, as these assets at the time of the approval were either to be used in generation of electricity or should have been available for use. The fact that Eskom had to make extensive use of OCGT was because of supply constraints on the part of Eskom especially because actual demand was lower than what was anticipated at the time of the decision.
- c. Therefore, while it may have been prudent for Eskom to run the OCGTs excessively instead of shedding load, the excessive use is due to inefficiencies in Eskom management of its generation fleet. Allowing Eskom to claim OCGT use in excess of what was officially approved by NERSA will be tantamount to rewarding Eskom for its own operational inefficiencies twice. This is because that Eskom during application phase declared availability of plant and as a result earning returns though such plant in real time turn out not to available.

4. Other primary energy Cost

- d. Eskom was allowed other primary energy cost of R5 535m and spent R6 890m and therefore claimed an RCA balance of R1 355m in its favor. This is despite the fact that demand for electricity dropped over the same period. Since other primary energy cost are essentially variable prudent and efficient Eskom should in fact have achieved savings on the particular items. These cost should therefore not be allowed as Eskom management where clearly not prudent and efficient as required by law.

5. IPPs and Renewable IPPs

- a. As can be seen in Table 2 below Eskom was allowed R595m for other IPPs and go-generation projects either than renewable IPPs. It however spent R2 102m more than what is was allowed. The entire amount is claimed as part of the RCA balance. This however should be disallowed as they made excessive use of third party generation due to its own plant availability been below target. The excessive use of

the third party generators was therefore due to operational inefficiencies in management of Eskom's generation fleet.

Table 2: IPPs and Renewable IPPs claimed for FY1415

Eskom 201415						
		Allowed	Actual	Variance	Adjustment	RCA (R'm)
5	Local IPP & Cogeneration	5 108	9 454	4 346	-2 231	2 115
	STPPP	92	62	-30	30	-
	MTPPP	503	2 635	2 132	-2 132	-
	WEPS	-	75	75	-	75
	IPP Ancillary	273	-	-273	-	-273
	Renewable IPP	4 240	6 553	2 313	-	2 313
	Deemed Energy		129	129	-129	-

b. Renewable IPPs are self-dispatched, it is therefore prudent to allow Eskom to recover over expenditure of R2 313m on Renewable IPPs as claimed in the RCA application. The claim for deemed energy should however be disallowed as the failure of Eskom to take delivery of such deemed energy was essentially because of its own operational inefficiencies.

c. WEPS should be allowed for reasons already provided by Eskom in the application while the R273m ancillary charge allowed as part of the MYPD3 decision should be returned to the customer as it was an inter-divisional charge that should not have been part of the original MYPD3 decision.

6. Import

a. No further comment to what is already presented in the application.

7. Environmental Levy

a. No further comment to what is already presented in the application.

8. Nuclear decommissioning provisions

a. No further comment to what is already presented in the application.

9. DMP

a. No further comment to what is already presented in the application.

10. CECA

a. No further comment to what is already presented in the application.

11. IDM

a. Eskom expenditure on IDM was lower than allowed by R299m. The RCA balance should be returned to the customer in its entirety as the methodology rightly provides for penalty for under achievement. The fact that Eskom achieved greater savings in itself constitutes a benefit to Eskom for which the customer has already paid.

12. Opex

- a. No further comment to what is already presented in the application.

13. SQI

- a. No further comment to what is already presented in the application.

14. CPI Adjustment

- a. No further comment to what is already presented in the application.

Eskom RCA application for Financial Year (FY) 1516

Eskom for FY 1516 applied for a RCA balance of R23 633m in its favor. As outlined in table 3 below the RCA balance for FY1415 can at best be R15 845m in Eskom's favor.

Table 3: Summary of estimated RCA balance for FY1516

201516						
		Allowed	Actual	Variance	Adjustment	RCA (R'm)
15	Revenue Variance	179 587	164 239	15 348		15 348
16	Coal	39 838	43 484	3 646	-2 174	1 472
	Price Variance			7 756	-2 174	5 582
	Volume variance			-4 110		-4 110
17	OCGT	1 508	8 690	7 182	-6 523	659
18	Other Primary Energy	6 040	7 129	1 089	-1 117	-28
19	Local IPP & Go generation	14 826	15 446	620	-3 620	-3 000
20	Import	93	3 660	3 567		3 567
21	Environmental levy	9 300	8 120	-1 180		-1 180
22	Nuclear decommission	-			128	128
23	DMP	-	248	248	-248	-
	Total Primary Energy	71 605	86 777	15 172	-13 554	1 618
24	CECA	42 065	56 978	14 913	-14 581	332
25	IDM	819	413	-406		-406
26	Opex					-134
	Total RCA Balance					16 758
27	SQI					318
28	CPI Adjustment					-152
						16 924

15. Revenue Variance

- a. Eskom was allowed total revenue from sale of electricity of R179 587m for FY1516. Eskom realised total actual of R164 239m from sale of electricity which resulted in a variance of R15 348m in Eskom's favor.
- b. The additional revenue streams are included as Eskom generates significant amounts of revenue for charging municipalities large amounts when "exceeding" their Notified Maximum Demand (NMD). While the intention of the NMD rules and associated penalty is to ensure effective load management by municipalities the manner in which the NMD charges are administered these charges simply seemingly amount to additional operational revenue and should for the purposes of the RCA be treated as such.

16. Coal Burn

- a. According to Table 21 on page 61 of 150 of the application Eskom was allowed coal burn of 128.014mt for R39 838m which translates into an average price of R311.20/ton.
- b. Eskom actual coal burn was 114.806Mt for R43 383m. Compared to the allowed R39 838m Eskom therefore overspent by R3 646m on the coal burned for FY1516.
- c. Eskom was allowed 128.014Mt coal burn, it however due to lower customer demand burned only 114.806mt which was lower by 13.21Mt or 10.32%. The coal volume variance which is the difference between actual volumes and allowed volumes multiplied by the allowed price amounted to R4 110m in favor of the customer; i.e. $(114.806-128.014) \times R311.20$. The variance is in favor of the customer as Eskom burned less coal than what was allowed.
- d. Eskom was allowed a price of R311.20/t, total cost of R36 617m, it however paid R378.76/t for actual coal burned of 114.806mt which resulted in total coal burn cost of R43 484m. Despite the fact that Eskom burned 10.32% less coal it paid 20.79% more compared to the previous year's actual price and as a result exceeded the NERSA allowed budget for FY1516. In terms of the provisions of the MYPD methodology Eskom is allowed to pass-through the entire coal variance except for the alpha factor, in terms of which it must absorb 5% of the actual cost per ton. In other words the actual cost R378.76/t is reduced by the alpha factor to R359.82/t which is 95% of the actual cost per ton. The alpha adjusted price variance which is the difference between the alpha adjusted actual price (R/t) and the allowed price multiplied by actual volumes; i.e. $(R359.92-R311.20) \times 114.804\text{Mt}$ or R5 582.17m in favor of Eskom.
- e. The total actual alpha adjusted coal burn cost is therefore R41 310m whereas Eskom was allowed R39 838m for coal burn. The total alpha adjusted coal burn variance is therefore R1 472m in favor of Eskom. The total alpha adjusted coal burn variance consist of a alpha adjusted price variance of R5 582m in favor of Eskom and a volume variance of R4 110m in favor of the customer.

17. OCGT

- e. Eskom as allowed R1 508m for OCGT, however it spent R8 690m and therefore claimed a variance of R7 182m in its favor as part of the RCA balance. According to page 80 of the application Eskom was allowed 152ML at R9.92/L. The OCGT RCA balance should therefore be limited to the price variance of R448m $((6.97-9.92) \times 152\text{ML})$ in favor of customer and the compensation to Eskom for additional GWh generated by OCGT at the average marginal coal generation cost (3397GWh \times 32.58c/kWh). Eskom should therefore be allowed a total of R659m in its favor for FY15/16.
- a. According to the MYPD methodology the OCGT fuel price variance is a full pass-through however limited to the allowed volumes which in this case was 152ML or R448m in favor of the customer, which must be allowed.

- b. Furthermore according to the Eskom MYPD3 application it targeted Energy availability factor (AEF) for FY1516 was 82.10%. Eskom however achieved an AEF of only 71.07%, which once again was mainly driven by unavailability of the coal fleet that accounts for the majority of Eskom generation capacity. The MPPD decision limited the use of OCGT due to the high declared availability of the Eskom coal fleet for which Eskom is compensated via appropriate depreciation and return on assets allowed as part of the MYPD3 decision, as these assets at the time of the approval were either to be used in generation of electricity or should have been available for use. The fact that Eskom had to make extensive use of OCGT was because of supply constraints on the part of Eskom especially because actual demand was lower than what was anticipated at the time of the decision.
- c. Therefore, while it may have been prudent for Eskom to run the OCGTs excessively instead of shedding load, the excessive use is due to inefficiencies in Eskom management of its generation fleet. Allowing Eskom to claim OCGT use in excess of what was officially approved by NERSA will be tantamount to rewarding Eskom for its own operational inefficiencies twice. This is because that Eskom during application phase declared availability of plant and as a result earning returns though such plant in real time turn out not to be available. It would therefore not be prudent to allow Eskom for excessive use of OCGT without adjustments to allowed return due to lower actual plant availability.

18. Other primary energy Cost

- a. Eskom was allowed other primary energy cost of R6 040m and spent R7 129m and therefore claimed an RCA balance of R1 089m in its favor. This is despite the fact that demand for electricity dropped over the same period. Since other primary energy cost are essentially variable a prudent and efficient Eskom should in fact have achieved savings on the particular items. These cost should therefore not be allowed as the cost were not managed in a prudent and efficient manner as required by law.

19. IPPs and Renewable IPPs

- a. As can be seen in Table 4 below Eskom spent R3 596m on its MTPP, Municipal and STPPP programs even though it was not allowed any amount for the particular programs as part of the MYPD3 decision. This over expenditure should be disallowed in its entirety as the use third party generation was essentially due to Eskom's own plant availability been below target.

Table 4: IPPs and Renewable IPPs claimed for FY1516

201516						
		Allowed	Actual	Variance	Adjustment	RCA (R'm)
19	Local IPP & Go generation	14 826	15 446	620	-3 620	-3 000
	MTPPP	-	56	56	-56	-
	Municipal	-	858	858	-858	-
	STPPP	-	2 682	2 682	-2 682	-
	WEPS	-	78	78		78
	DOE IPP	1 195	590	-605		-605
	IPP Ancillary cost	388	-	-388		-388
	Renewable IPPS	13 243	11 158	-2 085		-2 085
	Deemed Energy		24	24	-24	-

- b. The use of the third party generators was therefore was only because of operational inefficiencies in management of Eskom's generation fleet. Allowing Eskom to claim use of third-party generator cost will be tantamount to rewarding Eskom for its own operational inefficiencies twice. This is because that Eskom during application phase declared availability of plant and as a result earning returns though such plant in real time turn out not to available. It would therefore not be prudent to allow Eskom for use of any third party generation cost without adjustments to allowed return due to lower actual plant availability.
- c. With respect to the Renewable IPPs and the DOE Peaking IPP programs Eskom actually spent less than what was envisaged by the National Regulator, it is therefore prudent to return the variance in favor of the customer.
- d. The claimed deemed energy should however be disallowed as the failure of Eskom to take delivery of such deemed energy was essentially because of its own operational inefficiencies.
- e. No further comment to what is already presented in the application with respect to treatment of WEPS and ancillary cost.

20. Import

- a. No further comment to what is already presented in the application.

21. Environmental Levy

- a. No further comment to what is already presented in the application.

22. Nuclear decommissioning provisions

- a. No further comment to what is already presented in the application.

23. DMP

- a. Eskom was not allowed any amount for DMP and thus should not be allowed to claim any DMP expenditure as part of the RCA balance.

24. CECA

a. No further comment to what is already presented in the application.

25. IDM

a. No further comment to what is already presented in the application.

26. Opex

a. No further comment to what is already presented in the application.

27. SQI

a. No further comment to what is already presented in the application.

28. CPI Adjustment

a. No further comment to what is already presented in the application.

Eskom RCA application for Financial Year (FY) 1617

Eskom for FY 1617 applied for a RCA balance of R23 868m in its favor. As outlined in table 5 below the RCA balance for FY1617 can at best be R17 187m in favor of Eskom.

Table 5: Summary of estimated RCA balance for FY1617

201617						
		Allowed	Actual	Variance	Adjustment	RCA (R'm)
29	Revenue Variance	198 035	177 136	20 899		20 899
30	Coal	44 245	44 142	-103	-2 207	-2 310
	Price Variance			5 130	-2 207	2 923
	Volume variance			-5 233		-5 233
31	OCGT	1 599	340	-1 259	-280	-1 539
32	Other Primary Energy	6 327	7 049	722	-456	266
33	Local IPP & Go generation	19 269	21 721	2 452	-4 360	-1 908
34	Import	399	2 681	2 282		2 282
35	Environmental levy	9 490	8 086	-1 404		-1 404
36	Nuclear decommission	-			83	83
37	DMP	-	194	194	-194	-
	Total Primary Energy	81 329	84 213	2 884	-7 414	-4 530
38	CECA	46 655	58 924	12 269	-11 633	636
39	IDM	712	376	-336		-336
	Opex					-
40	Total RCA Balance					16 669
41	SQI					342
42	CPI Adjustment					162
						17 173

29. Revenue Variance

a. Eskom was allowed total revenue from sale of electricity of R198 035m for FY1617. Eskom realised total actual revenue of R177 136m from sale of electricity which resulted in a variance of R20 899m in its favor.

b. The additional revenue streams are included as Eskom generates significant amounts of revenue for charging municipalities large amounts when “exceeding”

their Notified Maximum Demand (NMD). While the intention of the NMD rules and associated penalty is to ensure effective load management by municipalities the manner in which the NMD charges are administered these charges simply seemingly amount to additional operational revenue and should for the purposes of the RCA be treated as such.

30. Coal Burn

- c. According to Table 22 on page 49 of the application Eskom was allowed coal burn of R44 245m at R343/t therefore a coal burn of 128.994Mt.
- d. Eskom actual coal burn was 113.737Mt at a total cost of R44 142m after adjustment for provisions of R510m in relation to the Medupi take or pay contract. Compared to the allowed R44 245m Eskom therefore underspent by R103m on the coal burned for FY1617.
- e. Eskom was allowed 128.994Mt coal burn, it however due to lower customer demand burned only 113.737Mt which was lower by 15.26Mt or 11.83%. The coal volume variance which is the difference between actual volumes and allowed volumes multiplied by the allowed price therefore amounted to R5 233m volume variance in favor of the customer; i.e. $(113.737-128.994) \times R343$. The variance is in favor of the customer as Eskom burned less coal than what was allowed.
- f. Eskom was allowed a price of R343/t, or total cost of R44 245m, it however paid R388.11/t for actual coal burned of 113.737Mt which resulted in total coal burn cost of R44 142m. Despite the fact that Eskom burned 11.83% less coal it paid 13.15% more for the unit price than was allowed. In terms of the provisions of the MYPD methodology Eskom is allowed to pass-through the entire coal price variance except for the alpha factor, in terms of which it must absorb 5% of the actual cost per ton. In other words the actual cost R388.11/t is reduced by the alpha factor to R368.70/t which is 95% of the actual cost per ton. The alpha adjusted price variance which is the difference between the alpha adjusted actual price (R/t) and the allowed price multiplied by actual volumes; i.e. $(R368.70-R343.00) \times 113.737\text{Mt}$ or R2 923m in favor of Eskom. The total alpha adjusted coal burn price variance is therefore R2 923m in favor of Eskom.
- g. The alpha adjusted total cost is therefore R41 935m, i.e. $(R368.70/t \times 113.737\text{Mt})$, whereas the allowed total cost was R44 245m, therefore the total alpha adjusted coal burn variance consist of R2 310m in favor of the customer consist of a alpha adjusted price variance of R2 923m favor of Eskom and a volume variance of R5 233m in favor of the customer.

31. OCGT

- a. No further comment to what is already presented in the application.

32. Other primary energy Cost

- a. Eskom was allowed other primary energy cost of R6 327m and spent R7 049m and therefore claimed an RCA balance of R722m in its favor. This is despite the fact that demand for electricity dropped over the same period. Since other primary energy cost are essentially variable a prudent and efficient Eskom should in fact have

achieved savings on the particular items. These cost should therefore not be allowed as the cost were not managed in a prudent and efficient manner as required by law.

33. IPPs and Renewable IPPs

- a. As can be seen in Table 6 below Eskom for FY1617 spent R3 883m on its MTPP, Municipal and STPPP programs even though it was not allowed any amount for the particular programs as part of the MYPD3 decision. This over expenditure should be disallowed in its entirety as the use third party generation was essentially due to Eskom's own plant availability been below target.

Table 6: IPPs and Renewable IPPs claimed for FY1617

33	Local IPP & Go generation	19 269	21 721	2 452	-4 360	-1 908
	MTPPP	-	37	37	-37	-
	Municipal	-	985	985	-985	-
	STPPP	-	2 861	2 861	-2 861	-
	WEPS	-	70	70		70
	DOE IPP	2 786	2 186	-600		-600
	IPP Ancillary cost	97	-	-97		-97
	Renewable IPPS	16 386	15 105	-1 281		-1 281
	Deemed Energy		477	477	-477	-

- b. The use of the third party generators was therefore only necessary due to operational inefficiencies in management of Eskom's generation fleet. Allowing Eskom to claim use of third-party generator cost will be tantamount to rewarding Eskom for its own operational inefficiencies twice. This is because that Eskom during application phase declared availability of plant and as a result earning returns though such plant in real time turn out not to available. It would therefore not be prudent to allow Eskom for use of any third party generation cost without adjustments to allowed return due to lower actual plant availability.
- c. With respect to the Renewable IPPs programs Eskom actually spent less than what was envisaged by the National Regulator, it is therefore prudent to return the variance in favor of the customer.
- d. The claimed deemed energy should however be disallowed as the failure of Eskom to take delivery of such deemed energy was essentially because of its own operational inefficiencies (i.e. delay in Eskom grid connection of projects, curtailment due to excess generation in specific hours)
- e. No further comment to what is already presented in the application with respect to treatment of WEPS and ancillary cost.

34. Import

- a. No further comment to what is already presented in the application.

35. Environmental Levy

a. No further comment to what is already presented in the application.

36. Nuclear decommissioning provisions

a. No further comment to what is already presented in the application.

37. DMP

a. Eskom was not allowed any amount for DMP and thus should not be allowed to claim any DMP expenditure as part of the RCA balance.

38. CECA

a. No further comment to what is already presented in the application.

39. IDM

a. No further comment to what is already presented in the application.

40. Opex

a. No further comment to what is already presented in the application.

41. SQI

a. No further comment to what is already presented in the application.

42. CPI Adjustment

a. No further comment to what is already presented in the application.

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