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Power Purchase Agreements

Illustrative Example Alternative Model

Objective

- 1 This agenda paper provides an Illustrative Example of EFRAG's own-use alternative model which was discussed by EFRAG FR TEG on 19 December 2023 (see agenda paper describing the alternative model [here](#))
- 2 This paper is structured as follows:
 - (a) Fact pattern
 - (b) Accounting under current IFRS 9 standard
 - (c) Accounting under EFRAG's alternative model
 - (d) Appendix 1: Simplifying assumptions
 - (e) Appendix 2: Individual journal entries

Fact pattern

- 3 At the beginning of period 20x0, entity A enters into a PPA, as a buyer, with the following characteristics:
 - (a) Duration: Deliveries of energy start at the beginning of 20x1 and the contract lasts for 25 years;
 - (b) Contracted volume: 60% of the production volume of a solar power plant owned by the counterparty in the PPA, entity B;
 - (c) Entity A also obtain the green certificates related to the energy purchased from entity B. The contract does not specify the price of the green certificates. This example focuses on the accounting for the electricity and does not illustrate the accounting for the acquired green certificates;

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- (d) The PPA has physical delivery of power and green certificates. It is assumed that the PPA is net settled according to IFRS 9 paragraph 2.6(d);
- (e) At the beginning of 20x0, entity A assumes that the PPA will be for own use except for the power purchased during the weekends and during the maintenance period of 4 weeks in March which will not be for own use and will be sold back to the market;
- (f) At inception it is assumed that the fair value of the PPA is zero. At inception the own use and non-own-use component is specified so that they all have a zero fair value, which implies adjusting the contract price of the components;
- (g) At the end of 20x0 the expectations of entity A about own use has not changed;
- (h) At end of 20x1 the expectations of entity A about own use change as the expected maintenance period is reduced to three weeks in March; and
- (i) At end of 20x2 expectations about own use change as the expected maintenance period goes from 3 weeks in March to 3 weeks in July.

4 The fair value of the entire contract and the fair value of the different portions of the contract at the end of each reporting period is summarised below:

Table 1 - FV at the end of each reporting period

FV CU	Entire contract	Weekends	4 weeks in March	3 weeks in March	3 weeks in July
end of 20x0	1,000,000	250,000	55,000		
end of 20x1	930,000	235,000	50,000	37,500	
end of 20x2	980,000	250,000		35,000	30,000

5 Simplifying accounting and measurement assumptions used to develop this illustrative examples are included in Appendix 1.

Accounting under current IFRS 9 standard

6 Applying the IFRS 9 requirements, entity A is assumed to fail the own use requirements for the PPA contract. Hence the PPA is to be measured in its entirety at fair value through profit or loss. An entity would register the following entries at the end of each reporting period:

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Table 2 - P&L and BS effects under current IFRS 9 requirements

		P&L (CU)		Balance sheet - derivative asset or liability (CU)	
		Debit	Credit	Debit	Credit
31.12.20x0	JE- FV changes	-	1,000,000	1,000,000	-
31.12.20x1	Delivery settlement (*)	-	-	-	40,000
	JE- FV changes	30,000	-	-	30,000
31.12.20x2	Delivery settlement (*)	-	-	-	38,750
	JE- FV changes	-	88,750	88,750	-

(*) Delivery settlement is the difference between spot and contract price that is settled on physical delivery of an item measured at fair value. The offsetting entries will be: Bank/Account payable: Credit Delivered volume * Contract price, and Inventory/P&L: Debit Delivered volume * Spot price.

Table 3 - Statement of financial position - in CU

	BS - derivative asset
31.12.20x0	1,000,000
31.12.20x1	930,000
31.12.20x2	980,000

Table 4 - Statement of financial performance - in CU

	31.12.20x0	31.12.20x1	31.12.20x2
Income/(expense) FV changes	1,000,000	(30,000)	88,750
Profit or loss	1,000,000	(30,000)	88,750

Accounting under EFRAG's alternative model

- Applying the alternative own use model, entity A assesses that power purchased during weekends and during the maintenance period is not own use and account for it at fair value through profit or loss. The remaining of the PPA is for own use and it is exempted from the scope of IFRS 9.

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Table 5 - P&L and BS effects under alternative own use model

		P&L		BS - derivative asset or liability								BS - non derivative asset or liability	
				Weekend		4 weeks in March		3 weeks in March		3 weeks in July			
		Debit	Credit	Debit	Credit	Debit	Credit	Debit	Credit	Debit	Credit	Debit	Credit
31.12.20x0	JE- FV changes	-	305,000	250,000	-	55,000	-	-	-	-	-	-	
31.12.20x1	Delivery settlement (*)	-	-	-	10,000	-	2,200	-	-	-	-	-	
	JE- FV changes	7,800	-	-	5,000	-	2,800	-	-	-	-	-	
	Increase in own use	-	-	-	-	-	12,500	-	-	-	-	12,500	
	Change in name of account	-	-	-	-	-	37,500	37,500	-	-	-	-	
31.12.20x2	Delivery settlement (*)	-	-	-	9,792	-	-	-	1,563	-	-	-	
	JE- FV changes	-	23,854	24,792	-	-	-	-	938	-	-	-	
	Contract value amortisation	521	-	-	-	-	-	-	-	-	-	521	
	Increase in own use	-	-	-	-	-	-	-	35,000	-	-	35,000	
	Decrease in own use	-	30,000	-	-	-	-	-	-	30,000	-	-	

(*) Delivery settlement is the difference between spot and contract price that is settled on physical delivery of an item measured at fair value. The offsetting entries will be: Bank/Account payable: Credit Delivered volume * Contract price, and Inventory/P&L: Debit Delivered volume * Spot price.

Table 6 - Statement of financial position - in CU

	BS - derivative asset					BS - non derivative asset
	Weekend	4 weeks in March	3 weeks in March	3 weeks in July	Total	Total
31.12.20x0	250,000	55,000	-	-	305,000	-
31.12.20x1	235,000	-	37,500	-	272,500	12,500
31.12.20x2	250,000	-	-	30,000	280,000	46,979

Table 7 - Statement of financial performance - in CU

	31.12.20x0	31.12.20x1	31.12.20x2
Income/(expense) FV changes	305,000	(7,800)	23,854
Income/(expense) decrease in own use	-	-	30,000
Amortisation non derivative asset	-	-	521
Profit or loss	305,000	(7,800)	54,375

Questions for EFRAG FR TEG

8 Do EFRAG FR TEG members have any questions or comments on this illustrative example?

Appendix 1: Simplifying assumptions

- 9 The simplifying measurement assumptions used to prepare this example are the following:
- (a) The effect of discounting is ignored for the purpose of this example;
 - (b) The limitation on recognition of day 1 gains or losses are ignored;
 - (c) At inception the PPA is assumed to have zero fair value;
 - (d) The accounting for the net zero offsetting entries at day zero (see paragraph 3(f)) is not shown in this example, nor is the subsequent release;
 - (e) All changes in fair values happen very close to period ends and all changes in own use estimates happen immediately thereafter; and
 - (f) For simplicity purposes all price curve movements are assumed to be parallel movements.
- 10 The simplifying accounting assumptions used to prepare this example are the following:
- (a) All the accounting is done at the end of the period; and
 - (b) For simplicity purposes we do not account for the unused energy put back into the market by entity A.

Appendix 2: Individual journal entries

Accounting under current IFRS 9 standard in CU

31-12-20x0

Initial recognition of the FV for the entire PPA

Dr	BS derivative asset	1,000,000
Cr	PL FV of the entire PPA	-1,000,000

31-12-20x1

Purchases of energy that are sold back into the market at spot price (energy is purchased at the adjusted contract price which takes into account the price of the contract and the PL recognised when fair valuing the contract)

Dr	PL purchases of energy (delivered volume * spot price)	X
Cr	BS derivative asset (deliveries of 20x1)	-40,000
Dr	BS cash (delivered volume * contract price)	Y
Dr	BS cash (delivered volume * spot price)	X
Cr	PL sales of energy (delivered volume * spot price)	X

Revaluation of the FV for the entire PPA

Dr	FV changes	30,000
Cr	BS FV adjustment of the derivative asset	-30,000

31-12-20x2

Purchases of energy that are sold back into the market at spot price (energy is purchased at the adjusted contract price which takes into account the price of the contract and the PL recognised when fair valuing the contract)

Dr	PL purchases of energy (delivered volume * spot price)	X
Cr	BS derivative asset (deliveries of 20x20)	-38,750
Cr	BS cash (delivered volume * contract price)	Y
Dr	BS cash (delivered volume * spot price)	X
Cr	PL sales of energy (delivered volume * spot price)	X

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Revaluation of the FV for the entire PPA

Dr	BS FV adjustment of the derivative asset	88,750
Cr	FV changes	-88,750

Accounting under alternative model in CU

31-12-20x0

Initial recognition of the FV for the non-own use portion

Dr	BS derivative asset (FV of the weekend purchases)	250,000
Dr	BS derivative asset (FV of the purchases during maintenance period)	55,000
Cr	PL FV of the non-own use portion	-305,000

31-12-20x1

Purchases of energy according to the PPA of the non-own use portion (weekends) and resales of energy at the spot price (energy is purchased at the adjusted contract price which takes into account the price of the contract and the PL recognised when fair valuing the contract)

Dr	PL purchases of energy weekends (delivered volume * spot price)	X
Cr	BS derivative asset weekends (deliveries of 20x1)	-10,000
Cr	BS cash weekends (delivered volume * contract price)	Y
Dr	BS cash (delivered volume * spot price)	X
Cr	PL sales of energy (delivered volume * spot price)	X

Revaluation of the FV for the non-own use portion (weekends)

Dr	PL FV changes	5,000
Cr	BS derivative asset weekends	-5,000

Purchases of energy according to the PPA of the non-own use portion (maintenance) and resales of energy at the spot price (energy is purchased at the adjusted contract price which takes into account the price of the contract and the PL recognised when fair valuing the contract)

Dr	PL purchases of energy maintenance (delivered volume * spot price)	X
Cr	BS derivative asset maintenance (deliveries of 20x1)	-2,200
Cr	BS cash maintenance (delivered volume * contract price)	Y
Dr	BS cash (delivered volume * spot price)	X
Cr	PL sales of energy (delivered volume * spot price)	X

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Revaluation of the FV for the non-own use portion (maintenance)

Dr	PL FV changes	2,800
Cr	BS derivative asset maintenance	-2,800

Recognition of the portion that goes into own use (1 week in March)

Dr	BS contract value of the portion becoming own use	12,500
Cr	BS derivative asset maintenance	-12,500

31-12-20x2

Purchases of energy according to the PPA of the non-own use portion (weekends) and resales of energy at the spot price (energy is purchased at the adjusted contract price which takes into account the price of the contract and the PL recognised when fair valuing the contract)

Dr	PL purchases of energy weekends (delivered volume * spot price)	X
Cr	BS derivative asset weekends (deliveries of 20x1)	-9,792
Cr	BS cash weekends (delivered volume * contract price)	Y
Dr	BS cash (delivered volume * spot price)	X
Cr	PL sales of energy (delivered volume * spot price)	X

Revaluation of the FV for the non-own use portion (weekends)

Dr	BS derivative asset weekends	24,792
Cr	PL FV changes	-24,792

Purchases of energy according to the PPA of the non-own use portion (maintenance) and resales of energy at the spot price (energy is purchased at the adjusted contract price which takes into account the price of the contract and the PL recognised when fair valuing the contract)

Dr	PL purchases of energy maintenance (delivered volume * spot price)	X
Cr	BS derivative asset maintenance (deliveries of 20x2)	-1,563
Cr	BS cash maintenance (delivered volume * contract price)	Y
Dr	BS cash (delivered volume * spot price)	X
Cr	PL sales of energy (delivered volume * spot price)	X

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Revaluation of the FV for the non-own use portion (maintenance)

Dr PL FV changes 938

Cr BS derivative asset maintenance -938

Recognition of the portion that goes into own use (3 weeks in March)

Dr BS contract value of the portion becoming own use 35,000

Cr BS derivative asset maintenance -35,000

Recognition of the portion that goes out of own use (3 weeks in July)

Dr BS derivative asset (FV of the purchases during maintenance period) 30,000

Cr PL FV of the non-own use portion -30,000

Amortisation of the portion that entered into own use in 20x1 (12,500/24 years)

Dr PL contract value amortisation 521

Cr BS contract value of the portion becoming own use -521