

Part (e)	Based on the information provided by SA Solar's management accountant, prepare the FY2018 variance report that shows the calculation of the standard cost variances that occurred during FY2018. Where materials usage (quantity) variances have arisen for the same reason, a combined usage variance may be calculated.		Marks
Variance type	Variance	Workings	
Sales volume variance	257 500	1	
Sales price variance	160 000	2	
Fixed manufacturing overhead expenditure	(75 000)		1
PV film price variance	14 100	3	
Combine Usage Variance	(108 500)	4	
Solar cells purchase price variance	(542 841)	5	
Solar cells usage variance	56 625	6	

	R	Marks
Workings 1 - Sales volume variance		
Additional panels sold	500	
Standard contribution:		
Sales price	1 600	
Variable costs		1
Solar cells ((72+3) x R5)	375	
Solar glass	150	
PVF film	300	
Other	160	
Variable manufacturing overheads	100	
Contribution	515	1P
Sales volume variance (<i>mark for showing direction of variance correctly</i>)	257 500	1C
Workings 2 - Sales price variance		
Flexed revenue ((11 125 + 500) x R1 600)	18 600 000	1
Actual revenue	18 760 000	
Sales price variance	160 000 F	1C
Workings 3 - PVF film price variance		
Standard price per m ² (300 / 2,5)	120	
Discount (120 x 5%) / (300x5%=15) / (300-285)	6	0,5
Materials purchased / Panel (2350/2.5= 940)	2 350	0,5
Price variance (<i>mark for showing direction of variance correctly</i>)	14 100	1C
Workings 4 – Combine usage variance		
Solar cells	375	
Solar glass	150	
PV film	300	
Other	160	
Variable manufacture overheads	100	
Cost per panel	1085	1C
Panel scrapped	100	1
Combine usage variance	(108 500)	1C
Workings 5 - Solar cells purchase price variance		
Change in price (R5,62 - R5)	(0,62)	1
Number of cells purchased	875 550	
Solar cells purchase price variance	(542 841)	1C
Workings 6 - Solar cells usage variance		
Flexed usage ([72 + 3 refer workings 1] x [11 825 produced])	886 875	1

**QUESTION 1 PART II
PAPER 1**

**ITC JUNE 2019
SUGGESTED SOLUTION**

Actual usage	875 550	
	11 325	
Standard cost	5	
Solar cells usage variance	56 625	1C
	Available	15
	Maximum	15
	<i>Communication skills – presentation</i>	<i>1</i>
	Total part (e)	16

Part (f) Critically discuss the standard costing schedule in paragraph 3 as a basis for determining the price at which the solar panels should be introduced to the retail market. No calculations are required	Marks
1. The costing schedule has the following omissions or errors, that will impact on both the long-term and short-term pricing	
1.1. Standard Pricing Schedule	
1.1.1. The current costing schedule is incorrectly based on the FY2018 standards . Since the price being set is a future price, the standards should be updated to reflect the realities of the most recent environment, which could include inflation, exchange rate fluctuations, new suppliers etc.	1 1
1.1.2. The fixed manufacturing overhead should be adjusted with the depreciation of any new machines purchased.	1
1.1.3. Given that SA Solar has now purchased the machinery to manufacture the solar cells, the cost schedule incorrectly includes the purchase price of solar cells .	1
1.1.4. Relying on a personal relationship to obtain a waiver of the B-BBEE level II requirement to qualify for the government subsidy is unethical and should therefore not be done.	1
1.1.5. SA Solar should therefore not expect to qualify for the government subsidy and should therefore not incorporate the subsidy into the pricing decision . Or (SA Solar could expect to qualify for the government subsidies due to its relationship with Department of Energy and should therefore incorporate the subsidy into the pricing decision).	1
1.1.6. For the short term , SA Solar's price should also include the opportunity cost from needing to end the relationships with some of the smaller wholesalers.	1
1.2. Short-term pricing decisions	
1.2.1. In the short term, SA Solar will most likely want to set a lower price to enable it to penetrate the retail segment , especially given the competition from imported solar panels that the public may perceive as better quality. It will therefore probably only consider incremental costs.	1
1.2.2. For the short-term pricing decision: <ul style="list-style-type: none"> The cost schedule should exclude the fixed manufacturing overheads that are currently included. 	1
1.2.3. In the long term, it is not sustainable for SA Solar to only cover incremental costs and therefore SA Solar will need to set a price that covers all committed costs , including fixed manufacturing overheads.	1
1.3. Long-term pricing decision	
1.3.1. An allocation of committed non-manufacturing costs needs to be included. All committed costs (both variable and fixed) need to be incorporated.	1
1.4. General Pricing	
1.4.1. If SA Solar is able to market their panel as a premium product, they could adopt a premium pricing strategy and not merely cover their production costs .	1
1.4.2. Level of competition in the retail, market, current supply and demand as well as the identification of competitor products is a critical consideration and must be researched before setting the selling price or optimal price to be charged.	1.4.3.
1.4.4. SA Solar is relatively small and would therefore be price takers , the market would therefore dictate the price achievable.	1
	Available 15
	Maximum 10
	<i>Communication – logical argument</i> 1
	Total for part (f) 11

Part (g) Discuss the key business risks for SA Solar with regard to the manufacture and sale of solar panels.		Marks
1	Importing components increase the risk of supply delays and issues with product quality. New components from a cheaper supplier have already exhibited manufacturing process losses and will result in additional man hours for inspection, scrapping and recovering claims from the supplier.	1 1
2	Reputational damage arising from inferior quality components, resulting loss of sales and reduced profitability from warranty returns. Reputational damage due to stock outages and product backlogs in the event of delays in shipping and customs clearing. Reputational damage arising from actual or perceived unethical behaviour during tender processes and resulting in loss of sales and future contracts due to customer negative association.	1 1 1
3	Risk of losses arising from foreign currency devaluation and unpredictable profitability due to input costs being accrued in Renminbi or US dollars.	1
4	Inappropriate assessment of cost components to be included and/or omitted from pricing decisions resulting in too low a price to the market reducing profitability or a too high a price resulting in lost sales due to lack of competitiveness in the market reducing profitability.	1
5	Non-compliance with strict health and safety regulations required for the manufacturing process will result in fines and penalties, and possibly third-party claims and training costs and third-party indemnity insurance.	1 1
6	The solar panel industry is vulnerable to technological changes (as it requires constant investment in product development), and thus SASolar is exposed to the risk of obsolescence of inventory if the inventory doesn't move quickly.	1
7	There might be a risk for future expansion, based on the fact that the company is a (Pty) Ltd and therefore potentially smaller in size, with less access to financing.	1
8	With wider acceptance and increased solar panel availability, sales prices are expected to drop impact margins requiring an increasingly effective sales and distribution to offset the reduction through increased volumes.	1
9	Increased competition from other energy alternatives will also impact market size requiring innovation and product diversification (concentration risk) to remain relevant and competitive in the industry.	1
10	The risk that SA Solar may not be able to employ sufficient skilled staff to supervise the manufacture and testing of the solar cell process as this could be a niche skill set even with the use of the new machinery.	1
11	Large risk of high production costs compared to Chinese and European products and competitors can under-price the SA Solar products.	1
12	The risk of embarking on the retail segment and manufacturing solar cells for the first time, that the quality of the cells may be at risk which will result in decrease demand even affect going concern.	1
13	Risk that continued power disruption from Eskom will affect SA Solar's manufacturing schedule and result in the large quantities of the idle time and costs that will need to be passed on to the customer.	1
14	Other retail solar panel competitors may be receiving the government subsidy as they meet all the requirements in their operations. The risk that this may render SA Solar pricing uncompetitive as it might be high relative to these competitors.	1
15	Geographical risk-SA Solar's operation and customers are located in one geographic area (South Africa), therefore any issues arising in this location could affect the going concern of the company as it is completely reliant on this area for business.	1
Available		19
Maximum for part (g)		8
TOTAL FOR PART II		35