

STRATEGIC CORPORATE FINANCE

PROFESSIONAL 2 EXAMINATION - AUGUST 2018

NOTES:

Section A - Answer Question 1; and

Section B - Answer **any two** from Questions 2,3 and 4.

Should you provide answers to more questions than required in Section B, you must draw a clearly distinguishable line through the answer not to be marked. Otherwise, only the first two answers provided will be marked.

STRATEGIC CORPORATE FINANCE TABLES ARE PROVIDED

Time Allowed

3.5 hours plus **20 minutes** to read the paper.

Examination Format

This is an open book examination. Hard copy material may be consulted during this examination subject to the limitations advised on the Institute's website.

Reading Time

During the reading time you may write notes on the examination paper, but you may not commence writing in your answer booklet.

Marks

Marks for each question are shown. The pass mark required is 50% in total over the whole paper.

Answers

Start your answer to each question on a new page.

You are reminded to pay particular attention to your communication skills. Care must be taken regarding the format and literacy of your solutions. The marking system will take into account the content of your answers and the extent to which the answers are supported with relevant legislation, case law or examples, where appropriate.

Answer Booklets

List on the cover of each answer booklet, in the space provided, the number of each question attempted. Additional instructions are shown on the front cover of each answer booklet.

THE INSTITUTE OF CERTIFIED PUBLIC ACCOUNTANTS IN IRELAND

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Case Study – Water Solar Plc

Jeff Doyle left college 20 years ago with a computer science degree. In college, he won a final-year competition by developing a prototype for an agri-tech product. Soon after, Jeff secured funding for his innovation from Enterprise Ireland and also won a 'Young Entrepreneur of the Year' competition. The product is a solar powered water pumping system. Jeff's business grew from strength to strength and is now one of Ireland's most successful agri-tech companies, Water Solar Plc. He based his business in the midlands in Ireland for distribution purposes and over the past five years has also exported products to the UK.

In order to start exporting the solar-powered water pumping systems, Jeff obtained agreement from his board of directors to float his company on the Irish Stock Exchange, which he successfully did in 2013. There are currently over 1,000 water and waste water treatment plants in Ireland today. These plants had been developed by Irish local authorities and were all transferred to Irish Water (a national utility company) in 2014. Jeff's solar powered water pumping systems are quite small in size. Water and waste water treatment plants could use up to 1,000 of his products at any one time. Even though there are a number of privately operated water treatment and waste water treatment plants in Ireland, Jeff focused all of his business on the municipal (i.e. local authority plants now the Irish Water) plants. He was of the view that dealing with local authorities and, more latterly, Irish Water would provide him with a steady and guaranteed income stream.

Since Irish Water has taken over the ownership, management and operation of the above mentioned plants (through 12-year service level agreements with the 31 Irish local authorities), demand for Jeff's water pumping systems has increased quite dramatically over the past 4 years. Irish Water have a 25 year investment plan to improve, enhance, rehabilitate and replace the water infrastructure in Ireland and has found that Water Solar Plc's solar powered pumping systems will be key to their investment drive into the future. A senior official in Irish Water said to Jeff at a recent meeting, that water infrastructure is extremely important to a small open economy such as Ireland from an economic, social, cultural and environmental perspective and a company such as Jeff's will play a big role in achieving the stated objectives.

As mentioned above, Jeff also does some business in the UK with about 10% of all sales to that market.

Water Solar Plc is now a very liquid company with a large amount of spare liquid capital on the company's statement of financial position. Jeff has been concerned for a number of years about using the spare capital for expansion purposes. A number of Jeff's friends left Ireland after completing college, particularly during the most recent economic crisis in Ireland. Some of his closest friends emigrated to Canada and developed very successful careers in the IT sector. On a recent visit to Vancouver he met some business executives who suggested that he should consider expanding his business to Vancouver. In fact, one of them, Paul Clack (an Irishman who emigrated to Vancouver 35 years ago) had developed a similar business to Water Solar Plc's and asked Jeff would he consider buying his business. Paul (who had just turned 70) wanted to get out of the industry for health purposes and retire to Ireland. Paul's business is called Van C Water Systems Plc. On returning from his trip, Jeff formulated a plan for his board of directors. He had not yet decided whether he should simply try and expand his business in Vancouver by buying land, building a factory etc. and grow it from the ground up. Another option would be to examine the possibility of acquiring an existing business such as Paul Clack's - Van C Water Systems Plc.

In order to prepare the final proposal and present it to his board of directors, Jeff hires you as his financial advisor to examine the two possible scenarios. You are to advise him which would be the most appropriate course of action to take. On his recent visit, Jeff examined a possible greenfield site where Water Solar Plc can build a new factory and successfully distribute its products to water treatment and waste water treatment plants in Vancouver (and possibly to other parts of Canada). Jeff wants you to complete your work by the end of September 2018 so that he can go to his board for the October meeting. In relation to the two scenarios that he has asked you to examine, Jeff wishes you to use a five year-time horizon. He has also asked you, in relation to your forecasted income and expenditure data to use discounted cash flow (DCF) analysis (Jeff always believed that DCF techniques are the best strategic corporate financial management techniques to use in project appraisals).

Jeff provided you with the current financial position of Water Solar Plc as at 31 August 2018. This is set out in Table 1 below:

Table 1:

Extracts from Statement of Profit or Loss and Other Comprehensive Income for Water Solar Plc to 31 of August 2018

	€Ms
Sales	400
Net Income	80
Taxation	10
Net Income after Tax	70
Dividends	20
Retained Earnings	50

Extracts from Statement of Financial Position for Water Solar Plc to 31 August 2018

Non-Current Assets	80
Short-Term Investments	160
Working Capital (includes €40 m bank balance which earns interest at 1% P.A)	80
Net Assets	320
Equity Shareholders	320

Water Solar Plc has 400 million shares in issue which are currently trading at €1.20 per share.

Scenario 1 – Growing Water Solar Plc in Vancouver

The first scenario that Jeff has examined involves the possibility of growing his business in Vancouver. From his initial analysis he has identified a greenfield site on the outskirts of the city. The greenfield site is very well serviced in terms of infrastructure (roads, water, public lighting etc.) and appears to be an ideal location to build a factory for this type of business. It also seems to be suitably located near the main motorway network for ease of distribution of the products within Vancouver and indeed to other parts of Canada. It is estimated that following will be key costs and income associated with this scenario for the next five years:

- The total building costs of the factory including architects costs etc. is estimated at \$ 8 million Canadian dollars (CDs). It is envisaged that ¼ of the total costs will be paid in year one (i.e in 2019) when the factory is complete and open for production purposes.
- The planning fee to be paid to Vancouver City Council is \$500,000 CDs and according to Canadian planning legislation this will have to be paid up front. Jeff has also heard that it can be difficult (in terms of timeframes) to obtain planning approval from the Council, and sometimes people and companies have to go to the appeals board to get the decision speeded up or even overturned.
- The machinery costs are estimated to be \$4 million CDs, and these will have to be bought straight away in order to start production.
- As the factory building will take approximately one year to complete, Jeff will need to rent a temporary factory premises for the year. The estimated costs of this is in the region of \$120,000 CDs and the landlord will require this rent to be paid in advance.
- When the factory is ready for occupation in one year's time (i.e. 2019), it is estimated that moving the machinery to the new premises will cost \$40,000 CDs.
- It is estimated that the new factory will produce 1,000 water solar units in year 1 and that this should rise to 1,200 units in year 2, and 1,300 units in years 3 and 4, levelling off to 1,200 units in year 5.
- The average contribution per unit is estimated at \$5,000 CDs.
- It is also estimated that the NPV of the cash flows after year 5 will be zero.
- 25 staff will be required in year 1 for production purposes and it is anticipated that this number will rise to 35 for years 2 to 5.
- Because of the skilled nature of the business, it is estimated that the annual salary costs of each of the staff will \$60,000 CD s.
- It is also anticipated that the premises will require two plant managers, and their salaries are expected to be \$95,000 CDs each per annum.
- Fixed costs (production) are expected to be circa \$120,000 CDs each year.

The factory will also have a CEO and three administrative staff. The CEO's salary is anticipated to be around \$200,000 CDs each year and the total administrative salary costs are expected to be approximately \$160,000 CDs per annum.

Scenario 2 – Purchasing Van C Water Systems Plc

The second scenario that Jeff has done some analysis of involves examining the possibility of acquiring Paul Clack's business - Van C Water Systems Plc.

Van C Water Systems Plc is a publicly owned business. The company's shares are traded over the counter as it is not big enough to list on the Canadian National Stock Exchange (CNSX). Paul's factory produces water solar units similar to Jeff's products. It is believed that the machinery in Paul's factory could be easily modified to produce Water Solar Plc's type of product with very little costs involved. It is also anticipated that Van C Water System's factory could produce the output that Jeff would require into the future. Paul, similar to Jeff, also deals with public sector agencies in selling his products and has built up considerable relations with these, including local authorities and a national water agency.

If Water Solar Plc was to purchase Van C Water Systems Plc it would of course save the anticipated cost of \$8 million CDs associated with establishing the factory (as identified in Scenario 1 above). Jeff anticipates, if he purchases Paul's company, that the sales for Year 1 will be \$600 million CDs and the operating costs will be \$584 million CDs.

As stated earlier, Paul has just turned 70 years of age and would like to retire from the business for health reasons and return to Ireland. However, he would only be willing to sell his business to Jeff if the 'price was right'. When he met Jeff he said that he would be prepared to sell his controlling interest in Van C Water Systems Plc for \$8 CDs per share. In his discussion with Jeff, Paul reckons (because of a recovering economy) that his business will grow at a rate of approximately 2% per year for the next 10 years. Van C Water Systems Plc has 18 million shares and the most recently quoted share price is \$8.15 CDs.

Because of your financial expertise, Jeff has asked you to undertake detailed research into the above two scenarios and give him the best advice as to which option he should choose. Taking Jeff's data, you examine all of the publicly available information possible. From the latter, you estimate the following forecasted financial statements and growth rates for Van C Water Systems Plc for the next 5 years. All of your projections are presented in Tables 2 and 3 that follow. One of the major assumptions you make is that the projections assume that Van C Water Systems Plc continues the existing business under its current management arrangements. You estimate that the long-term growth-rate of 2% predicted by Paul is accurate and will continue up until at least 2022.

Other information relevant to the two scenarios:

- The beta of Water Solar Plc stock is estimated by its stockbrokers at .9
- The market risk premium in both Canada and Ireland is estimated at 5.5%
- The risk free rate of interest in Canada is .60% and in Ireland is 1.4 %
- The exchange rate between the Euro and the Canadian dollar is \$1.5/€ 1
- The beta of Van C Water Systems Plc is .91
- Van C Water Systems Plc pays interest on its debt at 4%.

Table 2: Van C Water Systems Plc

Projected Statements of Profit or Loss and Other Comprehensive Income \$000's CDs

Year	2018 A*	2019	2020	2021	2022
Sales	600,000	612,000	624,240	636,725	649,460
Operating Expenses	584,000	595,680	607,594	619,746	632,141
Operating Income	16,000	16,320	16,646	16,979	17,319
Interest	1,440	1,280	1,348	1,432	1,352
PBT	14,560	15,040	15,298	15,547	15,967
Taxation	5,096	5,264	5,354	5,441	5,588
Net Profit After Tax	9,464	9,776	9,944	10,106	10,379
Dividends	4,000	4,000	4,000	4,400	4,400
Addition to Equity	5,464	5,776	5,944	5,706	5,979

Table 3: Van C Water Systems Plc

Projected Statements of Financial Position \$000's CDs

Year	2018 A*	2019	2020	2021	2022
Fixed Assets	112,000	104,040	99,880	108,244	97,420
Net Current Assets	60,000	73,440	87,392	82,776	97,420
Operating Assets	172,000	177,480	187,272	191,016	194,840
Cash	0	2,000	248	192	8
Net Assets	172,000	179,480	187,520	191,208	194,848
Shareholders' Equity	140,000	145,776	151,720	157,424	163,408
Debt	32,000	33,704	35,800	33,784	31,440
Total Financing	172,000	179,480	187,520	191,208	194,848

*Actual

END OF CASE STUDY

SECTION A - Compulsory Question

1.

REQUIREMENT:

(a) Critically evaluate whether:

(i) Building of a factory in Vancouver in order to grow Water Solar in Canada is a worthwhile project for Jeff Doyle's business. (20 Marks)

(ii) The purchase of Van C Water Systems Plc is a worthwhile investment for Water Solar Plc. (20 Marks)

(b) Provide Jeff with a recommendation as to which option would be preferable in order to expand his business. Justify your recommendation. (10 Marks)

[Total: 50 Marks]

SECTION B – Answer only 2 questions

2.

REQUIREMENT:

(a) Critically appraise the issues arising from the surplus cash in Water Solar Plc. (10 marks)

(b) Assess the key disadvantages for Water Solar Plc if the company acquires Van C Water Systems Plc. (10 Marks)

(c) Describe some of the key ways in which Water Solar's proposed takeover of Van C Water Systems Plc might be classified. (5 Marks)

[Total: 25 Marks]

3.

REQUIREMENT:

(a) Evaluate how Water Solar Plc's current activities expose the company to foreign exchange risk. (8 Marks)

(b) Appraise the increased foreign currency risks that Water Solar Plc could encounter if the company either builds a factory in Vancouver or acquires Van C Water Systems Plc. (8 Marks)

(c) Recommend the key courses of action that Water Solar should take to prevent or mitigate the foreign currency risk referred to in (a) and (b) above. (9 Marks)

[Total: 25 Marks]

4.

REQUIREMENT:

- (a)** Critically appraise the advantages and disadvantages of using equity in order to finance the proposed expansion plans of Water Solar Plc.

(12 Marks)

- (b)** Evaluate the key financial and business due diligence issues facing Water Solar Plc if the company acquires Van C Water Systems Plc.

(13 Marks)

[Total: 25 Marks]

END OF PAPER

SUGGESTED SOLUTIONS

THE INSTITUTE OF CERTIFIED PUBLIC ACCOUNTANTS IN IRELAND STRATEGIC CORPORATE FINANCE

PROFESSIONAL 2 EXAMINATION - APRIL 2018

SOLUTION 1

(a)

- (i) In order to critically evaluate whether building of a factory on the outskirts of Vancouver is a worthwhile project from Water Solar plc perspective it is firstly necessary to compute the NPV of the cash flows from the project using the data in scenario 1.

In order to compute the NPV of the cashflows an appropriate discount rate is required. From the cases study it can be seen that Water Solar plc is an all equity company and thus we can compute the cost of capital as its cost of equity using the CAPM formula as follows:

$$K_e = E(R_i) = R_f + \beta_i \{E(R_m) - R_f\}$$

$$R_f = 1.4$$

$$\text{Beta} = .9$$

$$R_m - R_f = 5.5$$

$$\text{Cost of Equity} = 1.4 + .9(5.5) = 6.35$$

Thus rounded off the cost of capital (K_e) is 6%

We will then use the latter information to compute the NPV as follows:

Scenario 1: Growing Water Solar's Business in Vancouver \$000' CDs

Time	0	1	2	3	4	5
Building Costs	-5,000	-2,000				
Planning fees	-500					
Machinery	-4,000					
Rent	-120					
Moving the machinery		-40				
Contribution		5,000	6,000	6,500	6,500	6,000
Production staff salary costs		-1,500	-2,100	-2,100	-2,100	-2,100
Plant Managers		-190	-190	-190	-190	-190
Fixed Production costs		-120	-120	-120	-120	-120
CEO's salary		-200	-200	-200	-200	-200
Administrative staff salary		-160	-160	-160	-160	-160
NCF	-10,620	790	3,230	3,730	3,730	3,230
Tax@35%	3,717	(276)	(1,130)	(1,306)	(1,306)	(1,130)
	(6,903)	514	200	2,424	2,424	2,100
DCF@5.6%	1	0.946	0.896	0.849	0.804	0.761
	(6,903)	486	1,882	2,058	1,950	1,596

$$NPV = \frac{1.069}{\$1.5} = \text{€ } 712,666$$

$$R = 0.6 + 0.91 (5.5\%) = 5.6 \%$$

As the above produces a positive NPV it is a worthwhile project.

- (ii) In order to critically evaluate the second scenario we estimate the value of Van C Water systems by estimating its free cash flow and then discounting this at its cost of capital.

The cost of capital of Van C Water Systems is estimated as follows:

Rf	.60
Rm - Rf	5.5
Beta	.91
Cost of Equity = .60+ .91 (5.5) =	5.61
Cost of Debt (Kd *(1-T) =	2.6
Millions of Canadian Dollars	
Market Value of Equity (\$8.15 x 18m)	146.7
Value of Debt	32
Value of Van C Systems	178.7
E/V	.820929
D/V	.179071
E/V*Ke	4.605411
D/V*Kd(1-T)	.465584
WACC	5.070996
Round to 5%	

We can use the WACC above to discount the after tax FCF from operations in order to establish the enterprise value. We then subtract the value of debt to ascertain the value of equity.

Computation of free cash flows 000's CDs

Year	2019	2020	2021	2022
PBIT 16,320	16,646	16,979	17,319	
Taxation (less)	(5,264)	(5,354)	(5,441)	(5,588)
Increase in WC	(13,440)	(13,952)	4,616	(14,644)
Increase in FA	7,960	4,160	(8,364)	10,824
FCF 5,576	1,500	7,790	7,911	
DCF @5%	0.952	.907	.864	.822
PV of Cashflows	5,308	1,360	6,731	6,503

TV of $(7,911 \times 1.02) / (0.05 - 0.02) = 268,974$

Total PV = 26,224 + 268,974 = \$295,198

Cost = 18m x \$8 = \$144,000

NPV = \$ 151,198 / \$1.5 = € 100,798

- (b) From the above calculations over a five year and using DCF analysis it would appear that both projects look worthwhile. However one of the key factors that has not yet been taken into consideration is the synergies that Van C Systems would bring which could be considerable. Some of the synergies would include the saving of the €8 m costs associated with building the factory and also €500,000 costs associated with the planning fees. Also, as stated in the case study Jeff could encounter planning problems from Vancouver City Council which could delay the commencement of production. Another potential synergy of acquiring Paul's company is that Jeff could utilise Paul's financial management expertise which in turn could further increase the competitiveness of the new acquisition and ultimately increase market share. Finally there is also the possibility of a financial advantage for Jeff by acquiring a Canadian corporation in relation to the potential use of use of tax- shields and tax benefits.

SOLUTION 2

- (a) Obviously a company with insufficient cash can be in trouble but this is certainly not the case for Jeff's business. Jeff might be personally concerned about having too much cash but his shareholders shouldn't have any concern at all. For example if Water Solar cannot invest in positive NPV projects then the company could return the surplus cash to its share holders in the form of special dividends or indeed in the form of share repurchase scheme.

One possible explanation why Jeff might be worrying about too much cash is that he could personally be worrying that having too much cash means that he is not being clever in how to invest his capital.

One of the potential problems facing Jeff is he doesn't either invest his capital or uses the excess cash in the form of dividends is that Water Solar may become a potential takeover target. However the latter might be a good situation for the shareholders of Water Solar but could be a concern for Jeff and his senior management team. Thus in this type of scenario the shareholders might get a higher return on their investments and some of the senior managers might in fact lose their jobs.

Overall, it might be argued that if Jeff doesn't acquire Van C Water Systems, he might return the surplus cash to the shareholders but be aware that giving the share holders extra dividends might in fact increase their future expectations.

- (b) If Jeff acquires Van C Water systems and decides to let some of the key personnel from the company go, or indeed some key personnel from the company leave as a consequence of the acquisition, the potential loss (i.e. people leaving the business who would have detailed knowledge of the Canadian market) could have a devastating impact on the new proposition.

Increased costs might result if there is a delay in employing the key personnel for the new venture.

If Jeff decides to bring staff from his Irish waste management business into the new workforce he could face frictions and internal competition that may also push up costs.

- (c) As Van C Water Systems is in the same business as Water Solar plc it could be classified as a horizontal merger. Thus from a strategic business perspective a horizontal merger should allow Jeffs' business to develop economies of scale by combining operations and in the long-run, to increase their market share and lower their marginal costs. Furthermore, they can offer a wider range of products to their customers without having to invest in new resources.

Van C Water Systems is operating in Canada (i.e. a different country to Water Solar operating in Ireland) and thus the merger could also be classified as an international merger.

However one of the key rationales for acquiring Paul Clack's business is to allow Water Solar access to distribution channels in Vancouver and ultimately to provide quicker and easier sales penetration in the wider Canadian market. Thus the merger may also be classified as a synergistic merger.

SOLUTION 3

- (a) Currently Water Solar sells 90% of its products and exports 10% to the UK market. In relation to exporting to the UK market Water Solar is faced with the very real possibility of a change in sterling against the Euro (particularly with the advent of Brexit). If there is a depreciation of sterling against the Euro then it may become more difficult for Water Solar to compete for market share based on price and this creates an economic exposure for water solar. However if sterling appreciates (which is very unlikely) against the Euro and this scenario should place Water Solar in a more competitive position.

It is a most likely situation that Jeff Doyle's business is invoicing its UK customers in sterling and the consequences of this are that a sterling price will be set but Water Solar will not receive a Euro equivalent for a number of months and this is referred to as a transaction exposure. The challenges with the latter is that a level of uncertainty surrounding the exact amount of euro to be received from a sale.

- (b) If Water Solar either builds its own factory and grows its business in Canada or acquires Van C Water Systems it will add another dimension to the exchange risk that Water Solar faces. If Water Solar builds its own water units in Vancouver, either by building its own factory, or acquiring Van C Water Systems then it most likely not face any transactions exposure. If however Water Solar exports its units either to its newly acquired business or to a potential business it might grow in Vancouver then it would face transactions exposure.

In relation to economic exposure this will relate to the value of its assets in Canadian dollar terms. Thus the value of its Canadian assets in Euros will change as the CD varies against the euro. If the CD appreciates it will Water Solar's assets more valuable and vice versa.

- (c) In order to mitigate the transactions exposure in the UK and if it occurs in Canada the use of a financial hedging instrument such as a forward contract, would be the best way forward, where there is an agreement with the bank to exchange a specified amount of foreign currency at a specified date in the future, with the exchange rate fixed at the time the contract is entered into.

As there is an extremely strong likelihood that sterling will weaken as a consequence of Brexit a forward contracting arrangement would be the most logical methodology for Water Solar to use in managing the currency risk. It would have the benefit to allow Jeff to know his cashflow, which in turn would make his budgeting and forecasting much easier. Not only would a forward contract eliminate the foreign exchange risk it would also provide Stack with the opportunity of availing of attractive foreign exchange rates prevailing in the market for delivery at a date in the future. However one of the disadvantages of forward contracts is that if Stack organised a forward contract he would be locked in with the contract once it has been arranged it, regardless of whether the circumstances change and because the rate is fixed, the business can't benefit from any favourable movement in the exchange rate. Thus if sterling strengthened as a consequence of Brexit Jeff could potentially lose out and lose profits (however the latter is very unlikely).

In dealing with the economic exposure to sterling perhaps Water Solar could borrow in sterling but may prove too expensive an option. One realistic option for Jeff would be to have a sterling bank account open and monitor all the cash flows in that account.

In relation to mitigating the risks in Canada perhaps Jeff could finance the operation in CD's where the CD's could be actually used to repay any CD loans. If Water Solar were to borrow in Canada then the business might avail of corporate tax advantage.

SOLUTION 4

- (a) As Water Solar is currently only financed by equity financing the following are some of the key advantages and disadvantages associated with the latter:

Advantages of equity finance

- The funding is totally committed to Water Solar business and for any intended potential projects. Investors only realise their investment if the business is doing well, eg through stock market flotation or a sale to new investors.
- Water Solar does not have to keep up with costs of servicing bank loans or debt finance, allowing Jeff to use the capital for business activities.
- Outside investors expect the business to deliver value, helping Jeff to explore and execute growth ideas.
- Some business angels and venture capitalists can bring valuable skills, contacts and experience to Jeff's business. They can also assist with strategy and key decision making.
- Investors have a vested interest in the business' success, ie its growth, profitability and increase in value and some Investors are often prepared to provide follow-up funding as the business grows.

Disadvantages of equity finance

However, there are drawbacks of equity finance too. It's worth considering that:

- Raising equity finance is demanding, costly and time consuming, and may take management focus away from the core business activities.
- Potential investors will seek comprehensive background information on Jeff and his business. They will look carefully at past results and forecasts and will probe the management team. Many businesses find this process useful, regardless of whether or not any fundraising is successful.
- Depending on the investor, Jeff may lose a certain amount of his power to make management decisions.
- Jeff may have to invest management time to provide regular information for the investor to monitor.
- There can be legal and regulatory issues to comply with when raising finance, eg when promoting investments.

- (b) Jeff may be concerned with all of Van C Water Systems historical financial statements and related financial metrics, as well as the reasonableness of the target's projections of its future performance. Topics of inquiry or concern for Jeff may include the following:

- What do the company's annual, quarterly, and (if available) monthly financial statements for the last three years reveal about its financial performance and condition?
- Are the company's financial statements audited, and if so for how long?
- Do the financial statements and related notes set forth all liabilities of the company, both current and contingent?
- Are the margins for the business growing or deteriorating?
- Are the company's projections for the future and underlying assumptions reasonable and believable?
- How do the company's projections for the current year compare to the board-approved budget for the same period?
- What normalized working capital will be necessary to continue running the business?
- How is "working capital" determined for purposes of the acquisition agreement? (Definitional differences can result in a large variance of the dollar number.)
- What capital expenditures and other investments will need to be made to continue growing the business, and what are the company's current capital commitments?
- What is the condition of assets and liens thereon?
- What indebtedness is outstanding or guaranteed by the company, what are its terms, and when does it have to be repaid?
- Are there any unusual revenue recognition issues for the company or the industry in which it operates?
- What is the aging of accounts receivable, and are there any other accounts receivable issues?
- Should a "quality of earnings" report be commissioned?
- Are the capital and operating budgets appropriate, or have necessary capital expenditures been deferred?
- Does the company have sufficient financial resources to both continue operating in the ordinary course and cover its transaction expenses between the time of diligence and the anticipated closing date of the acquisition?

Jeff will also be very interested in the extent and quality of the target company's technology and intellectual property. This due diligence will often focus on the following areas of inquiry:

- What domestic and foreign patents (and patents pending) does the company have?
- Has the company taken appropriate steps to protect its intellectual property (including confidentiality and invention assignment agreements with current and former employees and consultants)? Are there any material exceptions from such assignments (rights preserved by employees and consultants)?
- What registered and common law trademarks and service marks does the company have?
- What copyrighted products and materials are used, controlled, or owned by the company?
- Does the company's business depend on the maintenance of any trade secrets, and if so what steps has the company taken to preserve their secrecy?
- Is the company infringing on (or has the company infringed on) the intellectual property rights of any third party, and are any third parties infringing on (or have third parties infringed on) the company's intellectual property rights?
- Is the company involved in any intellectual property litigation or other disputes (patent litigation can be very expensive), or received any offers to license or demand letters from third parties?
- What technology in-licenses does the company have and how critical are they to the company's business?
- Has the company granted any exclusive technology licenses to third parties?
- Has the company historically incorporated open source software into its products, and if so does the company have any open source software issues?
- What software is critical to the company's operations, and does the company have appropriate licenses for that software (and does the company's usage of that software comply with use limitations or other restrictions)?
- Is the company a party to any source or object code escrow arrangements?
- What indemnities has the company provided to (or obtained from) third parties with respect to possible intellectual property disputes or problems?
- Are there any other liens or encumbrances on the company's intellectual property?

Thirdly Jeff will want to fully understand the target company's customer base including the level of concentration of the largest customers as well as the sales pipeline. Topics of inquiry or concern will include the following:

- Who are the top customers and what revenues are generated from each of them?
- What customer concentration issues/risks are there?
- Will there be any issues in keeping customers after the acquisition (including issues relating to the identity of the buyer)?
- How satisfied are the customers with their relationship with the company? (Customer calls will often be appropriate.)
- Are there any warranty issues with current or former customers?
- What is the customer backlog?
- What are the sales terms/policies, and have there been any unusual levels of returns/exchanges/refunds?
- How are sales people compensated/motivated, and what effect will the transaction have on the financial incentives offered to employees?
- What seasonality in revenue and working capital requirements does the company typically experience?

Fourthly, Jeff will be concerned not only with the likely future performance of Van C Water Ssystems as a stand-alone business; it will also want to understand the extent to which the company will fit strategically within Water Solar organization. Related questions and areas of inquiry will include the following:

- Will there be a strategic fit between the Van C Water Systems and Water Solar, and is the perception of that fit based on a historical business relationship or merely on unproven future expectations?
- Does Van C Water Systems provide products, services, or technology that Water Solar doesn't have?
- Will the company provide key people and if so what is the likelihood of their retention following the closing?
- What integration will be necessary, how long will the process take, and how much will it cost?
- What cost savings and other synergies will be obtainable after the acquisition?
- What marginal costs (e.g., costs of obtaining third party consents) might be generated by the acquisition?
- What revenue enhancements will occur after the acquisition?

Finally one of the most time-consuming (but critical) components of a due diligence inquiry is the review of all material contracts and commitments of Van C Water Systems. The categories of contracts that are important to review and understand include the following:

- Guaranties, loans, and credit agreements
- Customer and supplier contracts
- Agreements of partnership or joint venture; limited liability company or operating agreements
- Contracts involving payments over a material dollar threshold
- Settlement agreements
- Past acquisition agreements
- Equipment leases
- Indemnification agreements
- Employment agreements
- Exclusivity agreements
- Agreements imposing any restriction on the right or ability of the company (or a buyer) to compete in any line of business or in any geographic region with any other person
- Real estate leases/purchase agreements
- License agreements
- Powers of attorney
- Franchise agreements