

Customer Situation Assessment Tool

1. Background

The Power Smart Partners Program for transmission customers (PSP-T) is being revised to support the introduction of stepped rates. A number of energy efficiency “enablers” have been developed to assist customers in the implementation of energy saving projects. The main goal of this redesign is to motivate BC Hydro’s largest customers to adopt a process of continuous improvement with respect to energy efficiency.

The first step in the process of assisting customers to continuously improve their energy efficiency is to assess the customers’ ability to participate in energy management activities. This will allow BC Hydro to identify which enablers and at what level of assistance should be offered the customer to obtain the best results vis-à-vis BC Hydro’s short and long-term DSM objectives. This assessment is called the Customer Situation Assessment (CSA).

The purpose of the CSA is to identify where a customer is along the energy management continuum and their corporate alignment with BC Hydro’s Power Smart objectives. This information will define how PSP-T works with the customer to maximize their progress in energy efficiency.

This document represents the tool to be used to complete a Customer Situation Assessment of the key organizational attributes and business objectives for each transmission customer. The organizational attributes are characteristics that identify a facility’s ability to successfully undertake energy management activities. The business objectives define how well energy management aligns with key corporate objectives.

Table 1 shows the attributes and objectives that BC Hydro will assess for each transmission customer. Each one has been assigned a weighting to indicate its importance in assessing the customer situation. The first step in this Customer Situation Assessment is to give the customer a score for each attribute and objective. The Key Account Manager will score their customers with assistance from Industrial Marketing staff. The table has been filled in for a fictitious customer to demonstrate how the scoring would work.

Table 1: Attribute and Objective Scoring

Organizational Attributes	Factor Weighting	Customer Score (0 to 10)	Customer Score
Business Viability	20%	8	1.6
Energy Leadership	25%	4	1.0
Positive Employee Environment	20%	5	1.0
Facility Environment	15%	5	0.75
Criteria for Fiscal Decisions	10%	5	0.5
Available Tier 2 Energy	10%	5	0.5
Total	100%		5.35

Business Objectives	Weighting		
Business Opportunity	35%	10	3.5
Risk Management	30%	4	1.2
Market & production growth	20%	8	1.6
Corporate positioning	15%	6	0.9
Total	100%		7.2

The questions listed in the following sections will be used to guide the scoring process.

2. Organizational Attributes Questions

2.1. Business Viability

Considering the customer’s current financial situation and outlook, what is the customer’s ability to invest in Energy Efficiency?

The following questions or information will help determine the business viability of a customer.

Financial data that can be obtained from annual reports

- Capital Expenditures over last three years
- Plant & Equipment Assets over last three years (don’t include inventory)
- Debt Coverage Ratio
- EBITDA Growth
- Gross Margin Growth
- Debt/Equity Ratio
- Weighted Average Cost of Capital (WACC)
- Return on Equity (ROE)

Is plant capacity stable or growing?

Is there high turnover of personnel or labour-related issues?

Is the company the subject of a merger, acquisition or in receivership?

Business Viability Score, a zero value indicates an extremely limited ability to invest, a ten indicates a strong financial position and future.	
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2.2. Energy Leadership

Does the customer’s organization have management staff who are willing and have demonstrated willingness to provide leadership to energy efficiency initiatives?

Does the company have an energy policy?

What is the corporate management knowledge of energy costs and opportunities (How have they arrived at wanting to do something about energy?)?

Can you identify an energy champion that is responsible for energy management and is a Direct Report to the Facility’s Chief Executive? An energy champion:

- has thorough knowledge of technology and staff capabilities at the facility level.
- can prepare financial analysis to support engineering proposals.
- spends more than 50% of their time on energy issues.
- can influence decision-making at the general manager level.
- understands utility rate structures.

Can you provide recent examples of where the energy champion has implemented major projects or programs?

Does the facility actively maintain quality management systems such as ISO 9000 or Total Quality Management?

Does a corporate office consistently review costs and quality performance data for all facilities?

Are production metrics integral to performance evaluations for facility managers and staff?

<p>Energy Leadership Score, a zero value indicates that it doesn’t appear that there would be any management staff within the customer’s organization that would provide leadership, a ten indicates that senior management have demonstrated ability to lead energy efficiency initiatives.</p>	
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2.3. Positive Employee Environment

Is there a culture within the customer’s organization, whereby employees are encouraged to learn about energy efficiency opportunities and motivated to implement efficiency measures on their own initiative?

Does the organization support technical training of facility personnel?

Does the facility use incentive programs and methods of recognition for energy or raw materials stewardship?

Is energy efficiency viewed as an opportunity rather than a hassle?

Do they have engineers on staff?

Do they have a preferred engineering firm that they use on an ongoing basis?

Are the chief engineers comfortable using software to analyze engineering issues?

Do plant managers develop project proposals for capital budgeting purposes?

Is staff turnover a problem?

<p>Positive Employee Environment Score, a zero value would indicate that employees have a very low efficiency awareness and generally would regard Power Smart programs as a nuisance, a ten indicates that energy saving projects and measures have been implemented on an ongoing basis by self-motivated employees.</p>	
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2.4. Facility Environment

Are the customer’s facilities generally well maintained and considered attractive places to work or are they in a poor state of repair?

Is facility a consistently high performer with respect to health and safety?

Is plant staff well trained for their jobs?

Is the plant “well maintained”?

What is the age of the facility?

How would you rank the facility in terms of the application of recent technological advances with respect to their process, are they leading edge, keeping up with the competition or dinosaurs?

Does the facility maintain a scheduled maintenance routine for powerhouses, motor drives, pumps, compressed air and similar utilities?

Do they have a documented process for commissioning?

Production, inputs, and cost performance data are created and utilized at the facility level.

Facility Environment Score, a zero value would indicate old facilities where the customer has made almost no recent investments, a ten indicates that the customer’s facilities are well maintained and the customer makes ongoing investments to keep their facilities in better condition than their competition.	
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2.5. Criteria for Fiscal Decisions

Does the customer have a process in place which will permit decisions to be made to make energy saving capital investments, with a reasonable payback period?

Does the annual budget include factor inputs and production targets as well as dollar figures?

Are asset purchases judged primarily on a life cycle cost basis instead of first cost?

Does the facility invest in plant improvements instead of simply fixing what is broken?

What is the payback criteria for energy efficiency investments – less than one year, less than 2 years, less than 3 years, more than 3 years?

Is the organization willing to use leases and other off-balance sheet methods to finance major acquisitions?

Fiscal Decision Score, a zero value would indicate that the customer will not make any financial investments unless the payback is considerably less than a year, a ten indicates that the customer has invested in energy saving equipment with paybacks considerably more than 2 years.	
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2.6. Available Tier 2 Energy

What is their projected electricity consumption as a percent of their CBL?

Tier 2 Energy Score, a zero value would indicate that the customer has already reduced his Tier 2 energy to zero through load displacement or large energy efficiency project, a ten indicates that the customer's load is growing and more than 10% of their consumption will be Tier 2.	
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3. Business Objectives Questions

3.1. *Business Opportunity*

What percentage of the customer’s cost are for energy?

Cost Reduction Opportunities

What are their energy expenditures for electricity and other fuels?

What are the current cost reduction plans?

What is their energy costs as a percent of their operating budget?

Does the facility seek large paybacks as opposed to fast paybacks?

Financial Performance Goals

Where do they see their most significant opportunities for improving their financial performance?

How do they see an improvement in energy efficiency affecting their other financial indicators?

Business Opportunity Score, a zero value would indicate that the customer’s energy costs are less than 2%, a ten indicates that the customer’s energy costs are more than 25% of their total operating costs.	
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3.2. *Risk Management*

How sensitive is the customer’s business to energy price and energy reliability?

Do they have any energy supply reliability issues?

What is their exposure to energy price increases?

What is their annual purchase amount for electricity (MWh), natural gas (GJ), other fuels (GJ)?

Are current and future environmental impacts from the facility a concern to top management?

Risk Management Score, a zero value would indicate that energy is not very important to a customer's operation, a ten indicates that a 10% increase in energy costs may make the business not financially viable.	
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3.3. Market & Production Growth

Is the customer likely to expand and grow?

Is plant capacity stable or growing?

Do they have production goals?

Do they have market share goals?

What has been their history with respect to obtaining production and market share targets?

Growth Score, a zero value would indicate that the customer is probably going to close down within 2 years, a ten indicates that the customer has already implemented plans and made expenditures involving growth.	
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3.4. Corporate Positioning

How interested is the customer in being better than their competitors with respect to environmental and energy conservation issues?

Has the facility adhered to several beyond compliance initiatives or agreements with respect to environmental and social issues?

Is the facility under public scrutiny or “good citizenship” expectations?

Do corporate leaders perceive energy efficiency as an opportunity or a hassle?

Can you provide examples per their web site, annual reports or other company communications that the facility is interested in developing a corporate culture with respect to conservation?

Corporate Positioning Score, a zero value would indicate a customer who has not demonstrated any initiative to exceed environmental permit requirements or implement energy efficiency measures, a ten would indicate a customer who is ISO 9000 and 14000 certified and published accomplishments with respect to energy efficiency.	
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4. Other Market Intelligence

When are their maintenance shuts?

What is the facility’s capital planning cycle?

What is the facility’s operational expense planning cycle?

5. References

Russell, C, *A Self Test of Organizational Aptitude for Managing Energy*, Alliance to Save Energy, Washington, DC, March 2005.