

EMGT 835 FIELD PROJECT:
Marketing Plan for Transmission Planning Services

By

Linh Tu

Master of Science

The University of Kansas

Fall Semester 2006

***An EMGT Field Project report submitted to the Engineering Management Program
and the Faculty of the Graduate School of The University of Kansas in partial
fulfillment of the requirements for the degree of Master of Science.***

Tom Bowlin
Committee Chair

Date

Chick Keller
Committee Member

Date

Linda Miller
Committee Member

Date

ACKNOWLEDGEMENTS

I thank Consultation Company for the challenging opportunities presented to me as a transmission planner. I also thank Competitor for the years that I spent working with their expert transmission planners whom I learned everything that I know today about consulting, marketing and transmission planning. Without these two companies to guide me, I would not be able to do what I am doing now. I also want to thank the Engineering Management faculty and staff for teaching me management skills that I never would have learned through work only. Lastly, I would like to thank my husband for being flexible and supportive while I was going through the program, and especially during the last semester as I finished the project.

Table of Contents

EXECUTIVE SUMMARY	1
CHAPTER 1: Situation Analysis.....	2
State of General Business Purpose	2
Brand Equity Review	4
CHAPTER 2: Market Review	5
Market Analysis	5
Figure 1	5
Figure 2	6
Table 1	7
Figure 3	8
Figure 4	8
Figure 5	9
Figure 6	9
Figure 7	10
Figure 8	10
Table 2	11
CHAPTER 3: Customer Review	12
Customer Characteristics	12
Figure 4	12
Current Demand.....	13
CHAPTER 4: Assumptions and Risks.....	14
CHAPTER 5: Competitive Advantage	15
CHAPTER 6: Forecast and Strategy.....	16
Value Proposition.....	17
CHAPTER 7: Relationship Equity	18
Current & Future State.....	18
Relationship Sales Model	18
Marketing Proposals	18
Marketing Communications.....	18
Relationship Budget.....	19
CHAPTER 8: Sales Planning Chart.....	20
CHAPTER 9: Controls and Monitors	22
CHAPTER 10: Conclusion	23
REFERENCES	

EXECUTIVE SUMMARY

The state of the economy has been trending upward for the past two years, but several years since the September 11, 2001 World Trade Center incident the economy is struggling. Although Consultation Company seems to have weathered the storm fairly well because of its people, business market and industry; it is always a good idea to be on the lookout for new markets and clients in other industries and markets.

Transmission planning has always been a steady market for the electrical industry, but since 2000, transmission planning has gained popularity because of the shortage of generation supply and the aging infrastructure. The electric and generation industry is very dynamic right now because changes that are taking place due to industry deregulation. There is also a shortage of generation in certain high demand areas such as California, causing problems that require transmission planning services. The government has also been interested in the security of energy facilities since the end of 2001.

Consultation Company has limited experience in providing transmission planning consulting services. The transmission planner's role has always been to provide support within the company, but also had a broader scope of responsibilities not specifically related to transmission planning and not to outside companies who may require the help in transmission planning. It is essential that we take the market opportunity that currently exists to expand our services to our existing and new clients to grow the company profitably. Based on market analysis and developed plans, it is recommended that Consultation Company invest \$14,000 initially in marketing costs to expand the company's service markets in transmission planning.

This marketing plan contains the company's history, market review, customer review, assumptions and risk, competitive advantage, market forecast, value equity and relationship equity of opportunities for expanding into a new market with the electrical industry.

CHAPTER 1 SITUATION ANALYSIS

Statement of General Business Purpose

Consultation Company was founded in 1984 by two visionary founders who wanted to help clients manage their energy supply risk and control their total energy costs. Today, the company has evolved from a management consulting firm into a full service energy supply management company. In 2002, the firm renamed their non-consulting side of business Affiliation Company, to enable future expansion into more non-consulting businesses including:

- Project Development
- Management Services
- Electricity Trading
- Utility Services

In addition to the businesses in the non-consulting side of the firm, the following are services provided on the consulting side, still known as Consultation Company:

- Cogeneration services
- Energy facilities planning
- Energy supply management
- Transmission
- Utility formation
- Utility regulation
- Energy conservation and
- Renewable energy.

Consultation Company's current customer base consists of colleges and universities, governmental units, large energy users, and utilities throughout the United States. In addition to the current customer base, Affiliation Company can be considered an internal client. The company's mission is to enable clients to manage their energy risks and to control their total energy costs in the complex and changing world of energy industry restructuring. Consultation Company's vision is to provide superior service and be the industry leaders for consulting services in the energy industry. The company's strategic intent is to demonstrate leadership and knowledge in providing energy solutions to meet the needs of the energy industry. The company has three strategic goals, which are:

- Recruit and retain outstanding energy experts to help provide industry expertise in the energy industry.
- Put focus on the client's needs before the company's needs.
- Obtain repeat work from 100 percent of our clients.

A strengths, weaknesses, opportunities and threats (SWOT) analysis was performed in relation to other companies that compete in similar businesses. The results of Consultation Company's SWOT analysis are outlined below.

Company **Strengths**

- The firm is diverse in business services with energy trading, generation development, energy management and utility services.
- The firm is well positioned to grow in size as it has over the past 4 years.
- The company has many contacts throughout the industry because of over 20 years of business experience.

Company **Weaknesses**

- The majority (over 40%) of the company business is involved with one client – Power Agency.
- The firm is small and therefore cannot invest in expensive software for planning purposes.
- The company is owned by several owners, but all business decisions must go through the main owner, who owns the majority of the shares of the company.
- There are no set policies for quality reviews or company standards.
- Consultation Company is closely involved with our internal client, Power Agency, therefore making it more difficult to keep the separation between transmission services and generation services.

Company **Opportunities**

- De-regulation of the energy markets creates new opportunities for the company.
- The United States Government's focus on national security provides opportunity for government contracts in several different areas such as transmission planning.
- Renewable energy initiatives of the government and many major utilities create new opportunities for the company.

Company **Threats**

- Bigger consulting firms such as Black and Veatch, Burns & McDonnell, and Siemens Power Technologies have expertise in a broader range of services than to Consultation Company and therefore are a threat.
- Small firms without brand name association are at a disadvantage because they are not as well known as bigger firms.
- Big utilities that have recognized the benefits of providing transmission planning services are now working with reliability organizations and independent system operators to provide services in transmission planning.

Brand Equity Review

Consultation Company's brand is "Energy Supply Management". The company's brand personality is to provide energy customers with the capability to manage their energy risks and control their total energy costs.

The company displays its brand on two different websites. The company also solicits ads in newspapers, technical magazines and on campuses throughout the upper Midwest during the recruiting season. Although the company is small, their name is well known in the Minneapolis/St. Paul area and throughout Minnesota.

CHAPTER 2 MARKET REVIEW

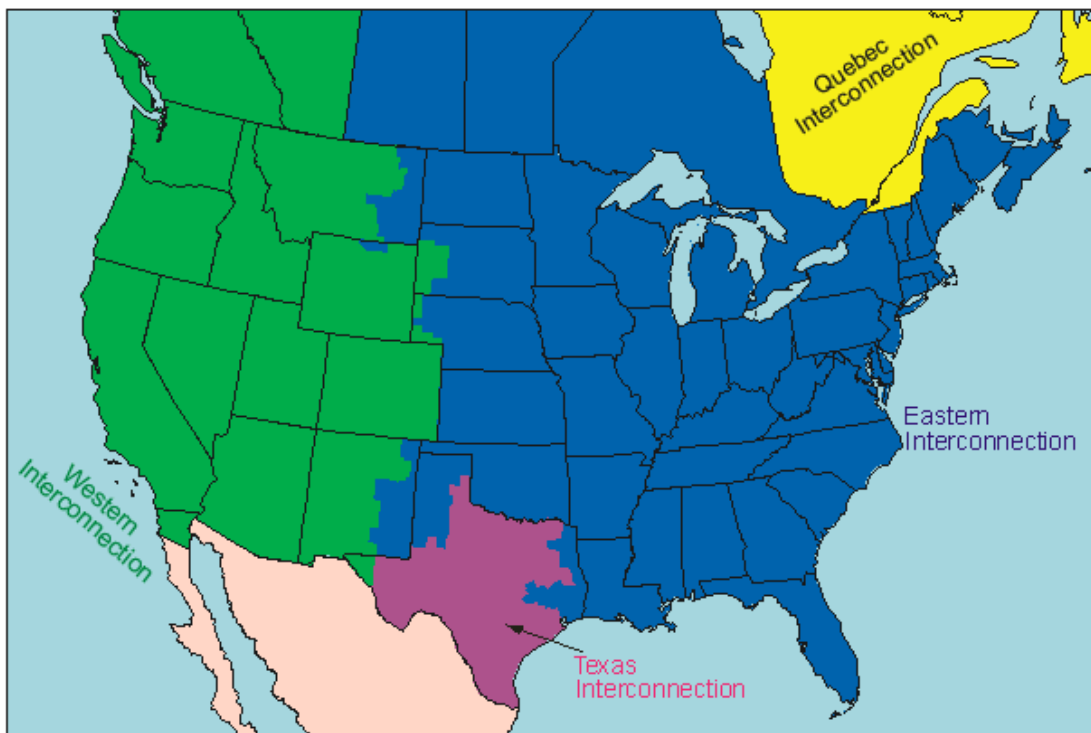
Market Analysis

The United States power system is divided into these three main power grids:

- Western Interconnect
- Eastern Interconnect
- Texas Interconnect

Figure 1 shows how the power system is divided among the three grids.

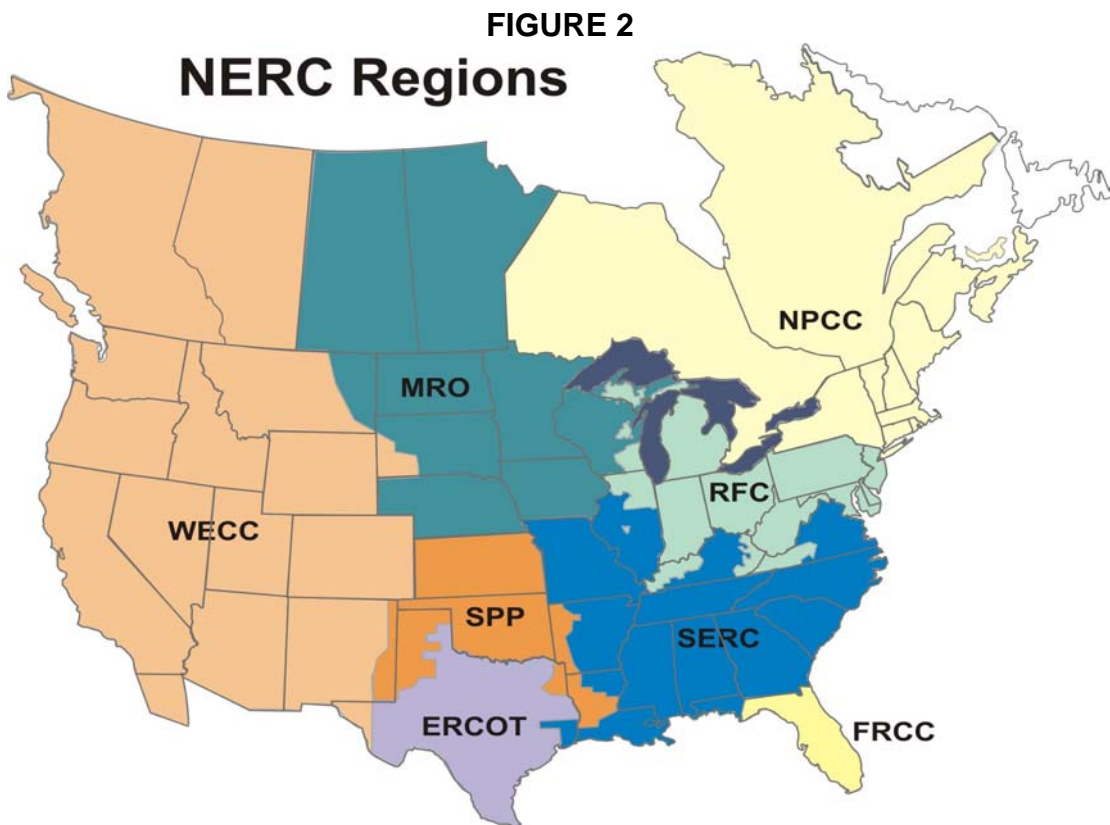
FIGURE 1
Interconnections of the North American Electric Reliability Council in the Contiguous United States, 1998



Source: <http://www.solcomhouse.com/electricity.htm>

The Texas Interconnection is linked to the other two interconnects only through direct connect (DC) lines. The Eastern and Western Interconnections connect with each other with alternating current (AC) and DC transmission lines, but the lines are very limited in number. Canada is very interconnected with the Eastern and Western Interconnects through both DC and AC voltage transmission lines.

Within each of the three major grids, the power system is further divided into eight smaller regions. The regions are defined by the North American Electric Reliability Council (NERC) and are shown in the following map. The Western Interconnect is comprised of the western states and is known as the WECC region, the Texas Interconnect is comprised of the state of Texas and is known as the ERCOT region, and the Eastern Interconnect is comprised of the states to the east of the WECC region and is comprised of the Midwest Reliability Organization (MRO), ReliabilityFirst Corporation (RFC), Southwest Power Pool (SPP), Southeastern Electric Reliability Council (SERC), Florida Reliability Coordinating Council (FRCC), and Northeast Power Coordinating Council (NPCC) regions.



Source: <http://www.reliabilityfirst.com/about/territory.jsp>

The total miles of high voltage AC current transmission lines in the United States in 1990 was 144,845 miles. Table 1 shows that the number of lines increased by 6.67% in 1999 to total 154,503 miles. By 2004, there was expected to be an additional 5,461 miles of high voltage lines interconnected to the already existing infrastructure.

TABLE 1

High Voltage Alternating Current Transmission Mileage in the United States, Selected Years				
Voltage	1990	1999	Change	Added by 2004
230 kV	70,511	76,762	6,251	2,415
345 kV	47,948	49,250	1,302	2,332
500 kV	23,958	26,038	2,080	582
765 kV	2,428	2,453	25	132
Total	144,845	154,503	9,658	5,461

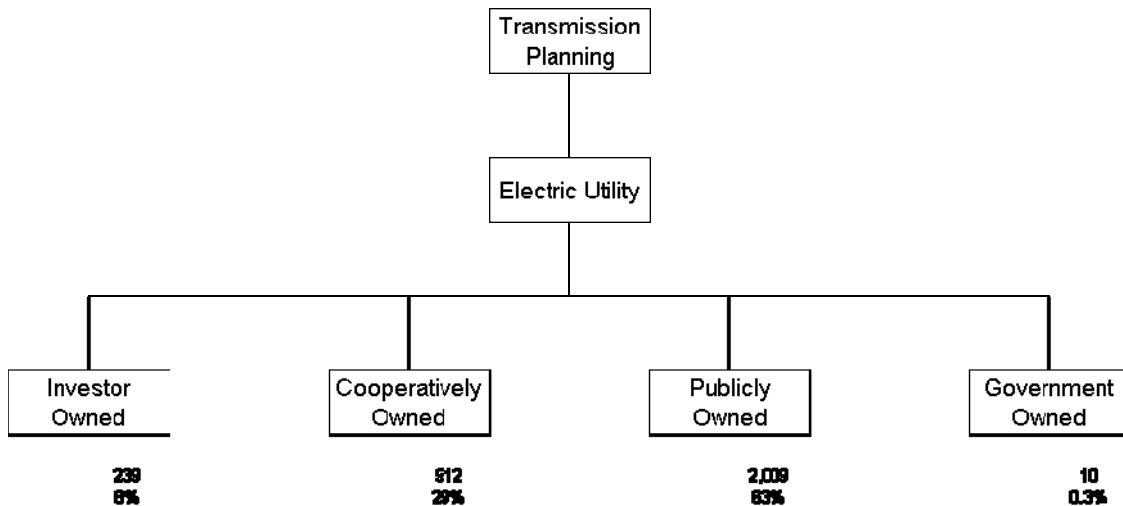
Source: http://www.eia.doe.gov/cneaf/electricity/page/fact_sheets/transmission.html

This amount of growth seen on the transmission system in the past several years is significant because it directly relates to the need for transmission planners who can help to assess, identify and plan for grid contingencies and load growth as the population grows. Studies have to be performed and plans have to be made before transmission lines or generation can be added to the existing system.

The shortage of power in some areas of the system has also created the need for additional generation development in the growing areas. The added generation to the electrical system adds stress to the existing lines and, like a highway, there may be congestion in some areas causing line overloads and voltage issues. Transmission planners will study the areas where additional generation is being added and help recommend system improvements that are both economical and feasible for the entity that has to pay for the upgrades.

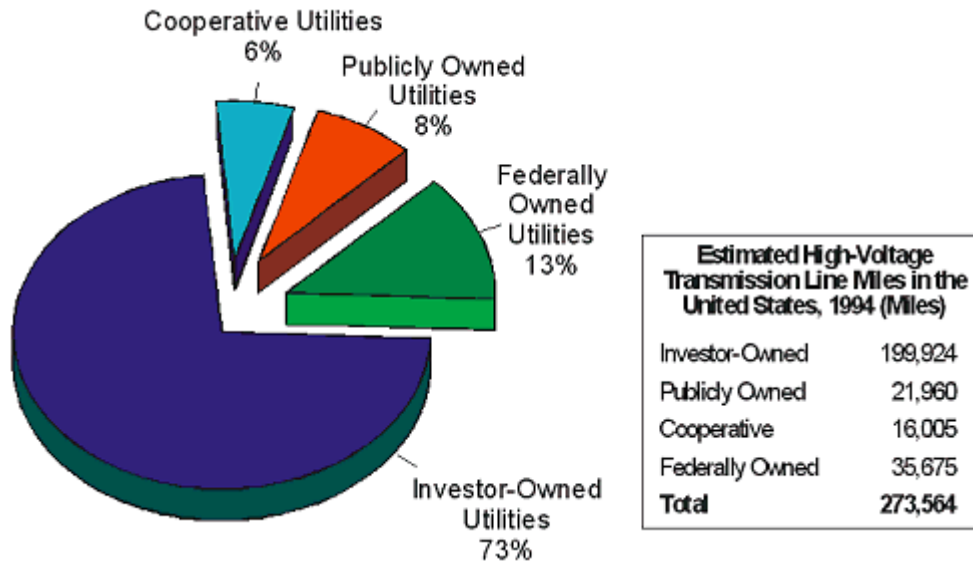
In addition to new generation adding stress to the current system, economic growth in some areas cause loads to increase and the present transmission system requires upgrading because of reliability or security issues. The Market Hierarchy shown in Figure 3 for the electric utility industry can be broken down into four groups by ownership.

FIGURE 3 Market Hierarchy



The Market Hierarchy identifies the four classes of utility ownership in the United States. The total number of utilities in the U.S. is 3,170. Of that total, only 0.3% is government owned. The public owns 63%, cooperative owns 29%, and investors own 8%. Potential customers can come from any of these classes. Not all utilities own transmission facilities. The following figure shows the estimated high-voltage transmission lines and the percent of ownership by each class throughout the U.S..

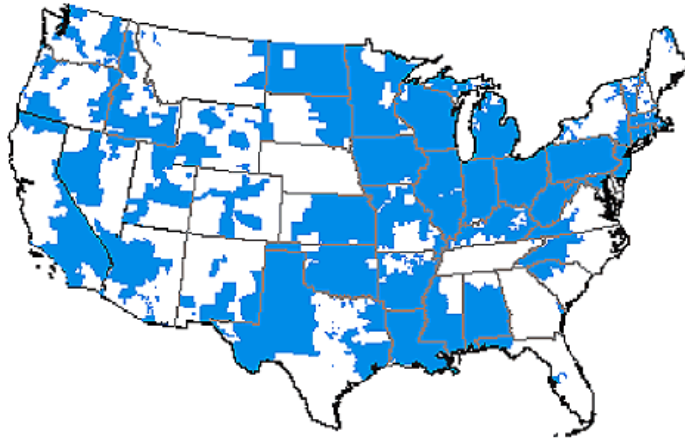
**FIGURE 4
Transmission Ownership in the United States**



The investor owned utilities (IOUs) operate in all 50 states except for Nebraska. IOUs earn a return for their investors and distribute their profits to stockholder as

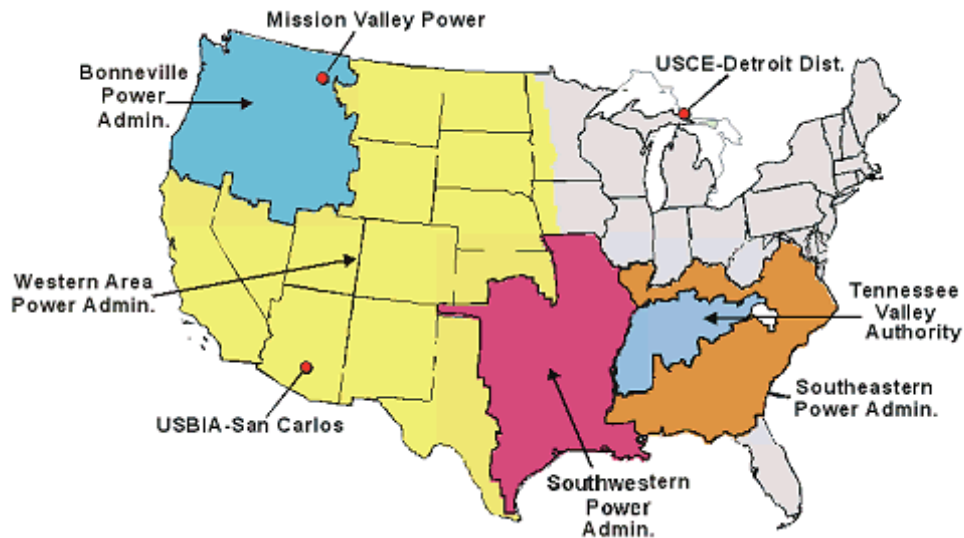
dividends or reinvest their profits. In certain geographic regions, IOUs are granted service monopolies. The state and federal governments regulate their business and therefore are given approval for rates that allow a fair rate of return on investment. Figure 5 shows a map of the service areas served by IOUs.

FIGURE 5



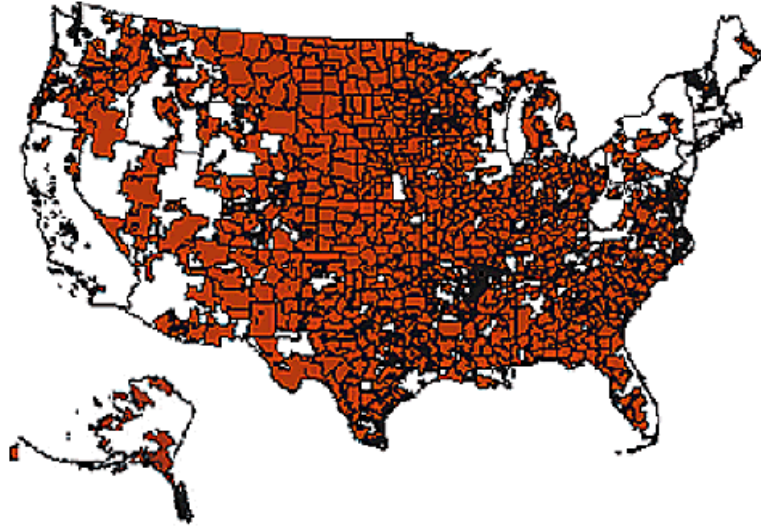
The federally (government) owned utilities operate in all areas of the U.S. except for the upper Midwest, Northeast and Hawaii. Their power is not generated for profit. The Tennessee Valley Authority is the biggest producer of electricity in this category. The areas where the federally owned utilities serve the U.S. are depicted in Figure 6.

FIGURE 6



Cooperatively owned utilities operate in all states except Connecticut, Hawaii, Rhode Island and the District of Columbia. They mainly serve members and customers who are rural farmers and rural communities. Their service areas are shown in the figure below.

FIGURE 7



The largest group of electric utilities in the four groups is the publicly owned utilities. They operate and charge for services at cost and return excess funds to the consumers in the form of community contributions and reduced rates. Their service territories are shown in Figure 8.

FIGURE 8

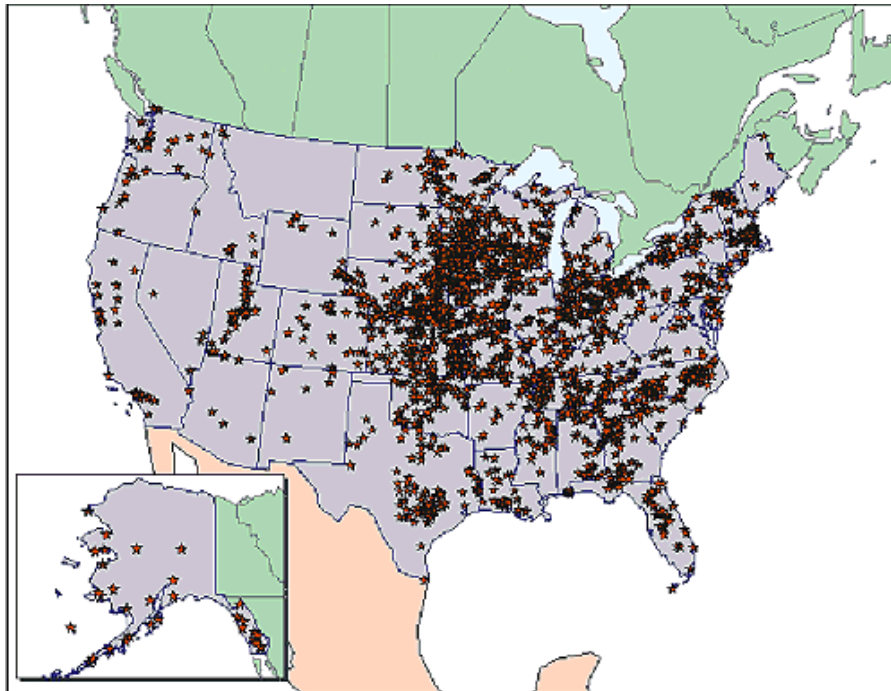


Table 2 shows the number of utilities in each class for the 8 regions including Alaska and Hawaii.

TABLE 2
Number of Electric Utilities by Class of Ownership & Region, 1998

<u>Region</u>	<u>Investor Owned</u>	<u>Federal</u>	<u>Public</u>	<u>Cooperative</u>	<u>Total</u>
RFC	78	0	408	155	641
ERCOT	6	0	66	58	130
FRCC	3	0	31	12	46
MRO	14	0	486	171	671
NPCC	58	0	127	10	195
SERC	20	2	352	262	636
SPP	11	0	250	86	347
WECC	27	8	253	137	425
Alaska	19	0	36	21	76
Hawaii	3	0	0	0	3
U.S. Total	239	10	2009	912	3170

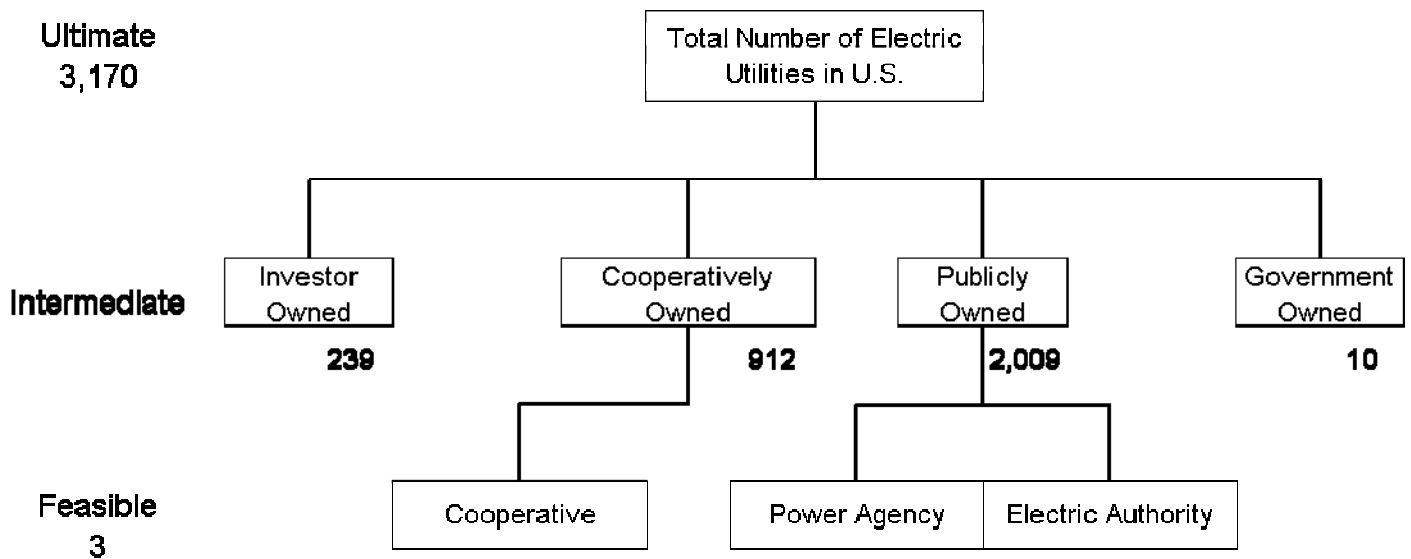
The U.S. transmission market is dynamic and changing on an annual basis. The changes that are occurring are perfect for the people in the transmission planning field of study. In order to keep the transmission system reliable with the changes that are occurring daily, such as new technologies, increase load in high growth areas, and increase generation in high demand areas, the utilities will need to be diligent planners to ensure reliability for all electric customers.

The transmission planning market matches the company's mission to enable clients in a complex and changing world of energy industry restructuring, to manage their energy risks and to control their total energy costs, and will enhance their presence in the electric industry. Based on Consultation Company's existing performance in the electricity consulting business, expanding consulting services to include transmission planning will position Consultation Company to be a strong leader in the market of transmission planning.

CHAPTER 3 CUSTOMER REVIEW

Figure 4 presents the Customer Characteristics Chart for the transmission planning market.

FIGURE 4 Customer Characteristics Chart



The majority of the customers in the transmission planning market are publicly owned utilities. The three feasible customers identified as initial target customers are Cooperative, Power Agency and Electric Authority. These three initial target customers have similar characteristics that make them ideal. They are small, have a limited planning department, and most importantly, a previous working relationship with all three companies will help to win new jobs in the future.

Funding for the investor-owned utility comes from private investors or the stakeholders of the utility. They do not benefit from the low cost federal loans and tax exempt bonds that the cooperatives and publicly owned utilities have access to.

It is thought that the characteristics of the ultimate customer for transmission planning services include all companies within the U.S. The characteristics of the intermediate customers are broken down into smaller groups. The cooperatively owned and publicly owned utilities are then narrowed down further and feasible customers were chosen from these two groups. The characteristics of the feasible customers are favorable for obtaining small projects. Their resources are limited and employees may not be as knowledgeable about the industry. These companies are the ones who

may need the most assistance from a professional who understands the market and can efficiently provide service without the added overhead.

In order to screen the customers at each level, further analysis would have to be performed to understand their specific needs. Speaking with individual prospective customers may be required to get a better understanding of their needs.

Current Demand

As can be seen from the number of ultimate, intermediate and feasible customers as shown in the Customer Characteristics Chart, the opportunities for major growth in the transmission planning industry appear very attractive at the current time. The feasible customers' expected evaluative criteria for assessing Consultation Company are:

1. Capabilities of the company and project team.
2. Availability of the team members.
3. Price of professional services.
4. Experience of project team members.
5. Credentials and/or reputation of the company.

CHAPTER 4 ASSUMPTIONS AND RISKS

Key assumptions relating to the transmission planning market and customers in that market are as follows:

- The 2004 regional blackout in the northeast portion of the United States created a greater perceived need for transmission planners.
- Utilities have added transmission capacity at a much lower rate than the rate of load growth. In order to maintain transmission adequacy at the normal load level would require an investment of about \$56 billion during the present decade, according to the Department of Energy.
- Restructuring the transmission planning market from individual utilities doing the planning to regional transmission organizations having the responsibility for planning and expanding transmission systems on a broad regional basis raises important issues because the need for individual planners at individual utilities will decrease if the market shifts to a regional transmission organization.

Major risks associated with the market and customers are:

- Historical congestion costs that are particularly reflected in the short-term nodal or zonal congestion prices adequate for deciding on transmission investments. This could have a significant affect on the number of transmission systems being built today.
- Economies of scale will have an affect on the number of transmission facilities being built. The economies need to be balanced with greater financial risks in building larger transmission facilities versus building the facilities in anticipation of future need in order to reduce the dollar and land costs per gigawatt-mile of new transmission facilities.
- The economic effects of the transmission's impact on regional power prices and the resulting impact on the regional economy should be factored into transmission planning as a risk that needs to be considered.
- The environmental effects such as the transmission availability on the generation mix and the resulting shift in generation emissions can be of risk to the market and customers. Remotely located renewable generators may also be a risk associated in the transmission planning process.
- Planning data needs to be compiled and created into a working model. Transmission planners who are knowledgeable with the database, working models and software, should create the data needed for transmission planning.

CHAPTER 5 COMPETITIVE ADVANTAGE

Consultation Company's competitive advantage in the electrical industry is their experience and expertise in the energy market. The company has been working with companies and individuals to help plan, develop and build power plants for over twenty years. The company has evolved from a small consulting firm of only several employees to a company of over 40 employees in less than 5 years. The transmission planning services that Consultation Company wants to provide will enhance their consulting business. Although the transmission planning team is prepared to provide powerflow, generation interconnection, short circuit, generating siting and other services related to these, the team does not have the expertise to perform transient stability studies. Lack of such expertise may be a significant hindrance to business development as this capability is very important in the power industry.

The competition for Consultation Company in the transmission planning industry are other consulting groups that are already well established, such as Burns & McDonnell, Black and Veatch, GE Planning and PTI Consulting. Currently, Consultation Company's performance in the market is 1%. Their market share is 0.5%. Currently, the competitors have greater ability to meet the customer needs because of their expertise in the transmission planning industry. Organizational and business changes within Consultation Company, such as provide training to employees on transient stability, will help meet certain clients' demand for expertise in the transmission planning market. In order to meet other clients' needs, Consultation Company should consider hiring additional mid-level to senior level transmission planners to help market services and provide additional expertise in transmission planning. The new personnel with better understanding of complex transmission planning theories will be able to assist clients in a variety of projects, instead of only the basic concepts that are inherent within the company currently.

CHAPTER 6 FORECAST AND STRATEGY

In the next year, it is estimated that three current customers of Consultation Company will be interested in transmission planning services from Consultation Company; namely, Cooperative, Power Agency and the System Operator. System Operator is a fully integrated regional transmission organization. They are not a utility; therefore, they were not part of the Market Hierarchy. They assist members with unbiased regional grid management in the upper Midwest and provide open access to the transmission facilities under System Operator's functional supervision. From these three entities, the estimated total sales volume for 2006 would be four projects. It is expected that the company can win 1 project from Cooperative, 1 project from the System Operator and 2 projects from Power Agency. Over the next several years, as experience in the industry increases, the sales volume is estimated to increase to 7 projects per year. The increase in projects is expected to continue to come from System Operator, who continues to grow and have a need for help in planning studies. If Consultation Company can win initial projects and begin to demonstrate that we are a good consultant fit with System Operator, then the System Operator should continue to provide projects and the total number of transmission planning projects could exceed the initial estimated 7 per year.

Reliable sales forecasts should help Consultation Company grow into a new services offering. In the next three years, the sales volume could triple, depending on the number of repeat customers and how many projects they have available in a given year.

In order to meet the objective of starting a consultant team for transmission planning, Consultation Company should,

1. Discount price by charging less for engineering and planning services. The management consulting fee is especially high for engineering consulting services and this needs to be reduced to meet industry standards.
2. Give customers more than what is in the scope of work, such as providing additional services that are not specifically stated in the scope of work.
3. Be competitive on fees when responding to request for proposals by utilizing lower-cost analysts and teaching them to perform services efficiently.
4. Provide additional training and support for continued education on planning software and in the energy and transmission planning industry.

In pursuing a strategy to grow transmission planning services, several key knowledge enhancement objectives include:

1. Attend System Operator seminars that are offered on an annual basis.

2. Attend energy industry conferences that are offered on an annual basis throughout the U.S.
3. Write articles for trade magazines and journals.
4. Keep abreast of the changing market by reading news articles and conducting internet searches because the market and industry are very dynamic.

The sales goal and profit for the 2006 year is expected to be:

Sales Goal = 4
Profit = \$140,000

This assumes that the average contract price is \$35,000 per project won. The \$35,000 per project is an estimate based on smaller studies that are performed with one project manager and one analyst. Most of the work will be performed by the analyst usually requiring approximately eight weeks of billable time. The profit of \$140,000 is determined by the four projects sales goal multiplied by the estimated \$35,000 per project cost.

Value Proposition

Provide industry expertise in transmission planning with technical expertise in generator stability. These services will be competitively priced compared to competitors and give customers quality service and innovative ideas and solutions to problems.

In addition to providing industry expertise, offering software training and sharing knowledge in performing planning studies will help add value to the services. Companies that are small will benefit greatly from the training because their employees usually are not as experienced with software and usually do not dedicate their full time to planning.

CHAPTER 7 RELATIONSHIP EQUITY

Current & Future State

The current state of Consultation Company's relationship with its customers is that approximately 75% of our customers are loyal to our company and the remaining are considered satisfied with our services, but not loyal. The high loyalty percentage stems from the fact that Consultation Company is a small firm with a limited number of clients that provide billable work to most employees almost 100% of the time.

In terms of transmission planning services, there are two current customers. They are very loyal to the company because of the agency relationship that the company has with the utility. However, if the company provides quality service for a fair price, the loyalty of new customers should not be a problem.

Relationship Sales Model

Consultation Company's Relationship Model

- Building Trust 30%
- Identify Needs 35%
- Presenting 30%
- Closing 5%

The relationship sales model of Consultation Company is appropriate for the transmission planning business because it puts a greater emphasis on identifying the needs of the clients. Building trust and presenting ideas to clients is also just as important, and therefore has as high of a ranking as identifying client's needs. This model should help to improve current client relationships because it targets clients' needs.

Marketing Proposals

Presently, Consultation Company does not have a standard marketing proposal process in place. Having a marketing proposal process is important, therefore, it is recommended that the company draw up a standard marketing proposal for future job opportunities.

Marketing Communications

Communication is very important in business and life, and in marketing it is no exception. In most situations, effective communications between the client and consultant determines whether the client is satisfied or not. The first thing a client judges a consultant on is communication. There are many ways to contact and communicate with potential clients. Some of the more popular methods of contacting potential clients include:

1. Use of the telephone to make cold calls

2. Visiting clients in person
3. Brochures/mailings
4. Conferences and seminars
5. Preparing and presenting papers
6. Internal communications

The methods listed above are appropriate in the buying and bonding process. The most effective method of communication is to actually visit the customer in person and build a relationship through one-on-one meetings. The purpose of going to conferences and seminars are two-fold. The employee would learn from others in the industry, stay up to date with the changes that are taking place in the industry and potentially make valuable contacts with whom they may call upon in the future to solicit work from. Using the telephone to contact the customer is another way to meet the feasible and intermediate needs of the customers.

The value proposition can be subtly used in marketing communications. The proposition can be printed in brochures and mailings, used in papers and presentation materials and during conferences and seminars. These are effective ways to make potential customers aware of Consultation Company's value proposition.

Relationship Budget

It is essential that the sales and marketing budget should be approximately 10% of the sales forecast because this is a newer market and more time and effort may be required when pursuing work in a market where the company has had very little experience. Thus, a reasonable allocation of approximately 10% of the total \$140,000 sales forecast for selling and marketing transmission planning services to the transmission planning industry would be as follows:

<u>Type of Marketing/Sales</u>	<u>Cost \$</u>
Telephone Time and Cost	\$ 700
Visiting Clients	\$4,000
Conferences and Seminars	\$5,000
Internal Communication Time	\$ 500
Brochures and Mailings	\$ 800
<u>Preparing and Presenting Papers</u>	<u>\$3,000</u>
Total	<u>\$14,000</u>

The greatest costs involve travel and expenses, which visiting with clients in person and going to conferences and seminars would require. The third greatest cost is allotted to the preparation and presentation of papers at conferences or meetings.

CHAPTER 8 SALES PLANNING CHART

The Sales Planning Chart below assumes that only one Consultation Company consultant will be doing the marketing to obtain new clients.

Market and Customers		Communications			First Year Sales Plan				Long Range			
	No. Potential Clients		Message	Stage in Buying or Bonding Process	Promotional Tools	Assign To:	Assigned Effort (Hours)	Assigned Direct Expenses	% of Total Effort	% of Total Budget	Goal No. of Clients	Priority
Jurisdictional Utilities												
Western Region	0	25	Expertise		Direct Marketing, Solicitation Emails, Cold Calls	LT	2 Hrs/Wk	\$700	5%	5%	2	3
Central Region	1	75	Expertise		Direct Marketing, Solicitation Emails, Cold Calls	LT	5 Hrs/Wk	\$1,750	12.50%	12.5%	5	2
Eastern Region	1	91	Value	Repeat	Direct Marketing, Solicitation Emails, Cold Calls	LT	5 Hrs/Wk	\$1,750	12.50%	12.5%	4	1
Federal Power Marketing Agencies												
Central Region	0	5	Expertise		Direct Marketing, Solicitation Emails, Cold Calls	LT	2 Hrs/Wk	\$700	5%	5%	2	4
Total	2	196					14 Hrs/Wk	\$4,900	35%	35%	13	100%

The first year sales plan is not aggressive. However, the subsequent years and long range plan are more aggressive, with expectations that my workload will be 100% taken up by the new clients within the next 5 years. A total marketing budget of \$14,000 per year will also be needed during the second and subsequent years. It is expected that the budget may need to be increased by from 8% to 10% during subsequent years.

The number of potential clients in the Central and Eastern regions will be easier to market to because they are in the System Operator footprint. The Western Region is isolated from the other regions electrically, and therefore may be difficult to obtain work because of the differences in the way they plan and design their systems. The Federal Power Marketing Agencies comprise of bigger organizations such as Bonneville Power Administration, Southeastern Power Administration and Western Area Power Administration, whom may already have resources for planning purposes. Their needs are likely taken care of by their employees; therefore any outside help from a consultant may not be necessary.

CHAPTER 9
CONTROLS AND MONITORS

The marketing plan will be monitored by logging activity performed within the plan on an Excel spreadsheet. Activity's time, date and person performing the activity will be entered into the spreadsheet. If the goals set forth in this plan are not met, alternative strategies will be implemented. The alternative strategies include:

- Expand the marketing strategies to other customers besides the upper Midwest utilities.
- Solicit work with other consulting engineering firms through subcontractor or partnership relationships.
- Besides transmission planning services, consider providing generation planning and/or load forecasting services.

CHAPTER 10 CONCLUSION

Venturing into new markets can be a risky business, however, in order for the company to grow profitably, it is important to recognize the industries that can be profitable through good and bad times. The electrical industry has proven to perform well even during tough times. It has performed extremely well during the past 5 years and is projected to keep growing as an industry for the next 10 years. Discovering renewable resources has already been stated as a priority for the federal government. Companies and utilities are busy with their own planning requirements and have a need for help, especially with the deregulation of the industry. Therefore, a carefully targeted initial Consultation Company investment of \$14,000 in marketing transmission planning services could potentially result in a substantial return over a relatively short time horizon.

REFERENCES

Department of Energy

(<http://www.eh.doe.gov/ntgs/issue1.html>)

Electricity Transmission Fact Sheet

http://www.eia.doe.gov/cneaf/electricity/page/fact_sheets/transmission.html

Energy Information Administration, The Changing Structure of the Electric Power Industry 2000:

An Update,

http://www.eia.doe.gov/cneaf/electricity/chg_stru_update/update2000.pdf,

October 2000

Federal Energy Regulatory Commission, <http://www.ferc.gov/>

Hirst, Eric and Brendan Kirby, “Transmission Planning and the Need for New Capacity”,

History of the Electric Power Industry

http://www.eei.org/industry_issues/industry_overview_and_statistics/history/#structure

Midwest Independent System Operator

<http://www.midwestiso.org/>

North American Electric Reliability Council

<http://www.nerc.com/>

