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The Effects of Liberalization – Case of EnergyAustralia Pty Ltd

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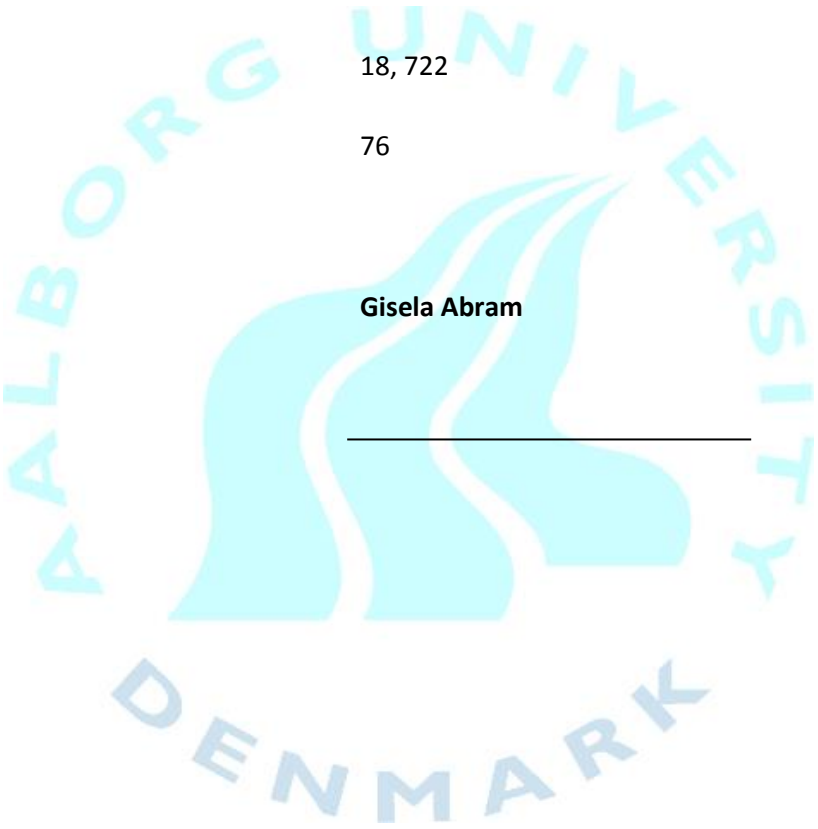

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1 Executive Summary

This is a Master thesis for the 4th semester of International Marketing Master`s Program in Aalborg University. In this paper, the mission is to gain understanding of the liberalization process in Australia and find the effects of the regulation to companies, who used to be state-owned in a natural monopoly position. The examples are taken from former Government owned company – EnergyAustralia Pty Ltd.

The researcher chose the issue, while working in a direct marketing company, where the interest for this topic was raised. Together with the supervisor, it was discussed why EnergyAustralia has lost its market share, and there rose the idea of studying the effects and consequences of liberalization process in Australia`s electricity market.

The project starts by describing the case study as well as the history of the Australia`s electricity market to build an overview for the reader. The research context and motivation will be described more in detail. The project continues with the methodology part, where the research describes the ontological and epistemological choices. Moreover other relevant theoretical discussions are in the methodology chapter. In this paper, there is used only secondary data because of the limitations and the thesis will end with the recommendations for the future research.

The conclusions and answer for the problem formulation was found after reviewing several literature and observing the Australia`s electricity market and consumer behavior, while the researcher worked in the industry. After analyzing the existing literature and comparing that to EnergyAustralia`s case, reasonable conclusions were made.

2 Introduction

Energetics is nowadays one of the backbones of economy. Everybody are dependent from electricity. The topic of sharing the electricity market is a problematic issue in Australia, especially after the companies have started to use fairly extreme methods to win the customers over. Liberalization had become one of the main directions of the energy policy. Liberalization comes from a Latin word *libertas* (freedom) and in economy means the reduction of economy`s intervention. Nowadays it means deregulation as well as privatization (in a broader sense means vertical and horizontal integration) The only supplier of electricity until 2001 - EnergyAustralia Pty Ltd - has lost its market share and is struggling to regain its position as it was before the liberalization by creating extreme marketing strategies.

2.1 Research Background – Australian Electricity Industry

Many countries over the last two decades have changed their electricity market structure and one of them is Australia. Australia`s electricity industry was a traditionally vertically-integrated state Government owned natural monopoly and has become a structured one to facilitate competitive wholesale and retail markets. The whole electricity industry was regulated by the states. Now, it has grown apart from the Government, which has made it possible to deregulate and liberalize the Australian electricity market. Liberalization is a process not an event; hence it is a long and fascinating micro-economic experiment.

There was a notable issue with the overcapacity in generation in the late 1980s, which lead the states to take action in the gaps of the electricity industry. Several proposals were generated to boost the performance of generation and the overall industry. One of the changes, where the reform process starts was to build an interstate transmission capacity to enable interstate trade. (Stridbaek, et al., 2005) Soon the transmission line opened and other states could use the power generated from other states.

The Commonwealth Industry Commission launched a report in 1991, which gave the final kick for the liberalization process to launch. The benefits they acquired to come out of it were lower prices to consumers, greater returns to stakeholders (traditionally governments), greater efficiency, and improved reliability and service quality. (Stridbaek, et al., 2005) The report presented series of points to be changed, which mainly were:

- placing transmission and distribution of gas and electricity on a commercial footing within one year;
- unbundling ownership of generation, transmission and distribution facilities within two years;
- breaking up electricity generating capacity into competing units;
- merging all state-owned transmission bodies into one organisation in order to establish a unified, national market; and requiring regulated third-party access to transmission and distribution networks. (Stridbaek, et al., 2005)

The new market will enable new retailers to establish, but they are required to apply for a licence in each department it wishes to participate. Furthermore, they can communicate to the generators of electricity directly and set the procedures for supplying power the customers. At that time, when this process was at its early stage, the level of competiveness was limited, but after the changes were made, the customers had the chance to choose the retailer.

After the regulations changed in Australia, the market is separated in generating, transmitting and distribution functions by companies and by a competitive national electricity market across the majority of Australia`s states and territories. (Pierce, 2012) Australia`s electricity industry had weak interstate connections and limited regional electricity trade.

Through the liberalization process several challenges are on the way – the pricing, transmission, retail access to all customers etc. One of the main objectives that Australia has in this continuous reform process is that "…the electricity market should be competitive", that the cost of consuming the delivered electricity is as low as economically feasible, but is still sufficient to induce investment in new capacity. (Stridbaek, et al., 2005) Although, newly competitive electricity markets play a notable role depends not only on their economic sense but also on their efficiency on their market sense. The price range formation is crucial, if they are to help improve the operation of the electricity market itself in the shorter term, and the capital market longer term.

The liberalization costs to vertical separation were in generation and transmission and between distribution and retail. In return the benefits of the liberalization was substantial, it reached to $1.5 billion in the year 2000, labour industry in electricity supply doubled in the last decade and capital productivity increased by 10% , while now the average retail electricity prices are now more than 10%

below the price range of early 1990s. (Stridbaek, et al., 2005) This new reform has given new jobs for the locals, while providing them electricity with lower prices and increased the overall economy of Australia.

However, according to Queensland University of Technology, Australia scholars, the process of completing the electricity reform in Australia has lost its pace. There are five members in the National Electricity Market (NEM): New South Wales (NSW), Victoria (VIC), Queensland (QLD), South Australia (SA), and the Australian Capital Territory (ACT). For these states the deadlines for full retail competition have been postponed and each of the five members has separate transmission companies. Only Victoria has secured its full privatization. (Stridbaek, et al., 2005) Because the different NEM members have different peak demands, they promote price differences across markets in order to avoid overloading of the interconnections. Also, it is solving the reliability issues and market power of regional utilities.

2.2 Case Study

The company now known as EnergyAustralia was founded as TRUenergy in 1995 from the combination of retail and generation assets purchased from Singapore Power (who in turn purchased them from TXU Corp), and CLP's own Yallourn Power Station, in Victoria's Latrobe Valley. TRUEnergy acquired the state-owned EnergyAustralia's energy retailing business in 2010 and changed its name to EnergyAustralia in 2012. (EnergyAustralia, 2010) Following the divestment of its retail assets, the name of the state-owned enterprise was changed to Ausgrid. EnergyAustralia (formerly known as TRUenergy) is a privately held company, engaged in the generation, distribution, and retail of electricity for residential and business customers in Australia. (EnergyAustralia, 2010) TRUenergy merged with EnergyAustralia, which was the largest energy retailer in New South Wales (NSW) and kept the

Figure 1. Map of Australia`s states

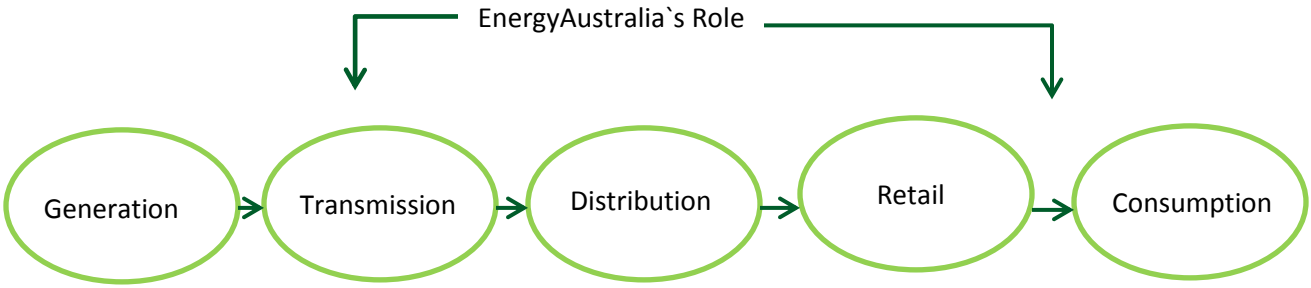
Source: http://www.australia.world-guides.com/

name EA. It offers various electricity and gas plans, including green energy options for households, and small and large businesses in various industries. The company owns and operates energy generation and storage facilities, including coal, gas, solar, and wind assets in Queensland, Victoria, New South Wales, and South Australia. EnergyAustralia primarily operates in Australia, where the headquarter is located in Melbourne.

The company is one of the largest energy suppliers in the country with more than 100 years experience.

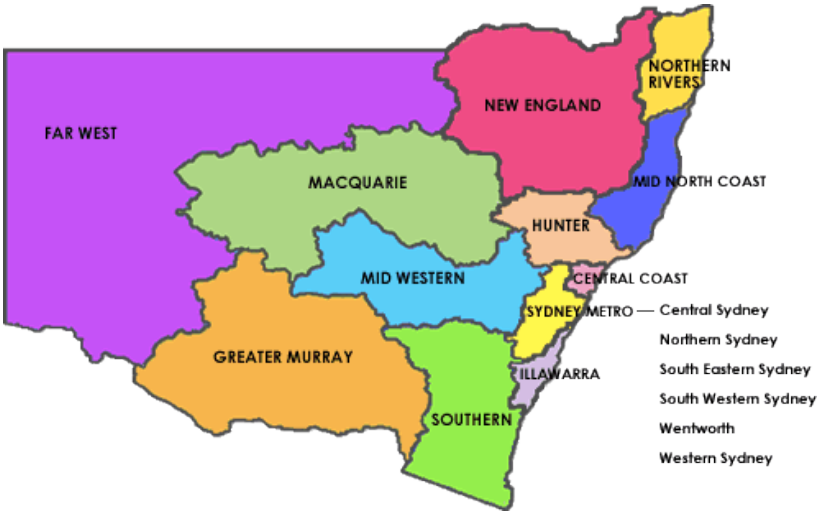
of providing a safe and a reliable supply of electricity. However, new retailers, who have come to the market, have posed a substantial competition to the company and taken the leading position from it. (EnergyAustralia, 2010) EnergyAustralia`s and TRUenegy`s retail customer base and ensures the company to provide competitive energy products and plans. (2012)It is uniquely comprised of both transmission and distribution systems that supplies electricity to more than three million people in Sydney, the Central Coast and the Hunter Region. EnergyAustralia retails electricity and gas to more than 1.4 million Australian homes and businesses in New South Wales (NSW), Australian Capital Territory (ACT), Victoria and Queensland. (EnergyAustralia, 2010)

2.2.1 Electricity Supply Chain



Source: Annual Report of EnergyAustralia, 2010

Figure 2. Map of New South Wales



Source: Internet http://www.australia.world-guides.com/

Major products and services:

EnergyAustralia (formerly known as TRUenergy) is a privately held company, engaged in the generation, distribution, and retail of electricity for residential and business customers in Australia.

The company's key activities include the following: Generation, distribution, and retail of electricity.

2.3 Research Context – Australia

This section is describing the country, where the research is based on in general, to give the reader a brief overview and understanding of Australia.

The continent was discovered rather late, comparing to the rest of the world., which is believe to be founded by James Cook in 1770 and claimed for Britain. Australia was settled by the British in the late 18th century and before that it was inhabited by the indigenous Australians. Basically, the country has grown as it is now, within less than 300 years. Australia is divided into six states: New South Wales

(NSW), Queensland (QLD), Victoria (VIC), South Australia (SA), Western Australia (WA) and Tasmania (TAS), between which the authority is divided. The capital of Australia is Canberra, which is located in NSW.

Australia is a federal parliamentary democracy and a constitutional monarchy. (MarketLine, 2012)According to the MarketLine report, Australia has a good economic situation, strong technology, high human development and a favourable environment for businesses. (MarketLine, 2012)For that, the country has taken several actions to achieve such strong statements made in the above sentence. However, Australia has also some setbacks, because of the government`s shifting position in certain issues. (MarketLine, 2012)

The economy is strongly depending on the cooperation with other countries, because it is based a lot on the export sector. (MarketLine, 2012) That said, Australia is really dependent also of the global economy`s situation. Main economic boosting sectors also include industrial and service skills, investment and trade competences that flow the country huge incomes. (MarketLine, 2012) Nevertheless, as these sectors are dependent on the IT sector, they can suffer from the poor labour in this field.

For developing the R&D departments in the country, it is considered fairly expensive, as nearer countries like India, could provide even better productivity with affordable wages. Hence, the country is suggested to bring changes in this sector by adjusting the salaries in the labour force. Overall Australia`s technology and communications sector is competitive, with the distribution of high-speed broadband. (MarketLine, 2012)

Australia has considered as a very prosperous economy for businesses, since the policies and legislations are favourable for the markets. The main weakness is the time consuming permit procedures, due to some permits acquire a full and long investigation. (MarketLine, 2012) All the same, the studies made in Australia have resulted in monetary stability and most open economy for the international commerce. (MarketLine, 2012)

Key indicators by MarketLine

MarketLine report has studied Australia's growth rate, which in 2010 was 2.5% and in 2012 rose by 1% to 3.5%. For the nest 4 years they have forecasted the rate to remain quite the same (3.3%-3.5%). The country hit the low point in 2011 with 1.9%. (MarketLine, 2012)

The inflation rate in 2010 was 2.8%, which is the lowest point, but rose to 3.1% in 2012. It is predicted to remain rather stable for the next 4 years, around 3% (2.8%-3.3%). (MarketLine, 2012)

For the unemployment rate, in 2010 as the highest was 5.2% and in 2012 decreased to 5.0%. The forecasted percentage is also decreasing up to 4.7% in 2016.

2.4 Research Motivation

The author`s Master Thesis topic is inspired by her work in a Australian marketing company - Australian Marketing and Promotions (ASAP), where she was doing direct marketing. The company was hired by one of the biggest electricity suppliers and brand names in Australia – EnergyAustralia Pty Ltd. During the period working in the company, it all came to a start, when the researcher developed an interest, why use so extreme marketing methods like door-to-door marketing. The company taught the workers before getting to their tasks, that EnergyAustralia Pty Ltd. was the biggest electricity supplier until 2001, but has lost a lot of clients to its competitors over the years and now try to get their customers back. The researcher`s task was to find the problem and dig into the history of Australian electricity market. However, the biggest challenges were that the country, where the research is held, is completely new and different from where she comes from and the topic itself was broad, but interesting. When working in the company, it brought the author to wish to gain understanding of the industry itself and issues behind EnergyAustralia Pty Ltd., company wise. After covering the academic courses in the university, where provided case studies on paper and solving given problems, this is a practical case study where the author finds the loop hole and answers to it. In addition, this paper gives an insight not only to the researcher to obtain practical knowledge and experience for the future profession, but also to the marketing company ASAP as well, to have a analysed problem with reasonable solutions for it.

2.5 Problem Formulation

Based on the research background, EnergyAustralia Pty Ltd`s history and liberalization process in Australia itself, this paper focuses on the liberalization process of Australia`s electricity market, mainly from the perspective of how the companies react and behave to the situation. By saying that, the research question is: *How does the liberalization of Australia`s electricity market effect the firms that used to be Government owned and in a natural monopoly state*? Case is based on EnergyAustralia Pty Ltd, which is compared to the available literature about liberalization, its objectives and its usual outcome. The methodology chapter will describe more detail, about the research process.

Sub-questions:

1) Why did the electricity market liberalize in Australia?
2) How is the liberated electricity market managed?

2.6 Delimitations

The significant limitation mainly consisted of not only the time, but also the company willingness to cooperate directly with the researcher. The collection of primary data could have given a deeper insight and overview to the company itself and its problems. The issue raised behind this paper, was mainly composed by the researchers knowledge and secondary data, which can be claimed rather recent and reliable sources. This data is collected, when keeping the problem formulation in mind and only relevant sources for the topic of this paper. The secondary data used for the background of the Australian electricity industry were official/annual reports composed by the authorised bodies. Furthermore, the numerical data can be also considered as a trusty source, due to the fact that the reports are put together by MarketLine.

By focusing on only one company, deep analysis can be conducted. Furthermore, the company used in this research has a long history, which helps to link connections with the history of the electricity industry history in general. Some sections consist of observed information, while the author was working in the company. Surely, when using more than one or a different company, the results of this paper will reveal differently.

In the report the author tries to find applicable theories for the case, considering the limitations for available resources. From numerous frameworks, paradigms, concepts and theories, the relevant ones are chosen for the raised problem statement. In addition, the wide framework of those theories created for analysing companies, is lowering the reliability of results.

The judgement, knowledge, observations and cultural background of the researcher is likewise influential for the analyse. However the conclusions and recommendations are suitable for current world.

2.7 Key Terms

Competitive advantage – "The factor which enables a firm to compete successfully with competitors on a sustained basis particularly to satisfy consumer needs and wants. This leading theory and models of competitive advantage (both of industries, and then of nations) were advanced by Michael Porter in the 1980s. They have had an enormous influence on market strategy and planning." (Doyle, 2011)

Country-of-origin – "is the country of manufacture, production, or growth where an article or product comes from. There are differing rules of origin under various national laws and international treaties."

Economies of scale – "are the cost advantages that enterprises obtain due to size, with cost per unit of output generally decreasing with increasing scale as fixed costs are spread out over more units of output."

Ex ante - before hand, in advance (Babylon, 2013)

Ex post - retrospective, after the event (Babylon, 2013)

Liberalization – "is a policy by which a government does not discriminate against imports or interfere with exports by applying tariffs (to imports) or subsidies (to exports) or quotas. According to the law of comparative advantage, the policy permits trading partners mutual gains from trade of goods and services." (Babylon, 2013)

Market concentration – “is a function of the number of s and their respective shares of the total production (alternatively, total capacity or total reserves) in a market. Alternative terms are Industry concentration and Seller concentration.” (Babylon, 2013)

Market power – “is ability of a company to raise prices to a level higher than the general market price and maintain the high price over a significant period of time.” (Babylon, 2013)

Scale effect – “The scale effect indicates what happens to the demand for the firm's inputs as the firm expands production.” (Babylon, 2013)

Scale of economy – “are the cost advantages that enterprises obtain due to size, with cost per unit of output generally decreasing with increasing scale as fixed costs are spread out over more units of output.” (Babylon, 2013)

Sunk costs – “are expenditure that has already been made with some objective, but which cannot be recovered if that objective is abandoned. (Covey, 2009)

Transaction cost – “Transaction costs consist of costs incurred in searching for the best supplier/partner/customer, the cost of establishing a supposedly "tamper-proof" contract, and the costs of monitoring and enforcing the implementation of the contract.” (Babylon, 2013)

Vertical integration – “When a company expands its business into areas that are at different points on the same production path, such as when a manufacturer owns its supplier and/or distributor. Vertical integration can help companies reduce costs and improve efficiency by decreasing transportation expenses and reducing turnaround time, among other advantages. However, sometimes it is more effective for a company to rely on the expertise and economies of scale of other vendors rather than be vertically integrated.” (Babylon, 2013)

Vertical unbundling – “eliminating one or more of the elements of a firm's product offering.” (Babylon, 2013)

3 Methodology

The purpose of this chapter is to explain the methods and methodology that was carried out in the research to justify these choices. Also, the collection and importance of the data used in the paper and the thinking process behind the researcher.

3.1 Research Objectives

According to Walliman (2006) the research objectives "project delineate the intentions of the researchers and the nature and purpose of the investigation." The main purpose of this research is to investigate the effects of liberalization on companies and their reaction to the new system, who were Government owned and the only retailers on the market. The paper will investigate how the companies behave to such a change, based on the only former leader of the Australian market - the case of EnergyAustralia. Literature concerning the selected topic, will be compared with the current situation of the market, which will give the paper its outcome. Thus, one of the objectives is to examine the background and condition of EnergyAustralia as a business in its current market situation after the liberalization. This will be compared to its former situation before the liberalization and also with the competitor`s position in the current electricity market. It will be evaluated if the outcomes will meet the predicted suggestions described beforehand.

3.2 Research Design

Research design constructs a framework after the objectives have been set. The thesis is an example of qualitative method as it is dealing with questions "why?", "how?" and "who?" in the use of literature, the author primary uses books from the curriculum and the case study as well as articles to get a theoretical perspective to the research. This means that the main emphasis is on understanding the theories and the case study. This type of research is uses to conduct a market research, which allows the researcher to use statistical papers from MarketLine and other local sites. Bryman (Bryman, 2004) explains that research design introduces and frames the chosen methodology for collecting and analyzing data. When the researcher is thinking of the research design, she should already have an idea what the analysis will be. (Bryman, 2004)The starting point for the research is finding an interesting

topic to investigate. Often the topic chosen is too broad, so it has to be narrowed down with a specific theme and focused on research question. (Neuman, 2006) The process of leading initial ideas to the concrete research question decides the form, course and progress of the research. (Neuman, 2006) Strauss and Corbin suggest that the research question should be framed "…in a manner that will provide the flexibility and freedom to explore a phenomenon in depth". (Strauss, et al., 1998) This paper`s problem question is, as already mentioned in the introduction part:

How does the liberalization of Australia`s electricity market effect the firms that used to be Government owned and in a natural monopoly state?

It is complicated to solve the research problem without dividing the main hypothesis into smaller questions. (Walliman, 2006) Instead of moving straight to the analysis part, the research design should be created and followed through the progress of the research. (Bryman, 2004) The main question was divided into 3 sub-questions (see table 1:), which were formulated to help to get the solution to the main issue of this paper.

Table 1. Overview of the sub-questions

Theoretical Analysis	Method
1. **Why did the electricity market liberalize in Australia?**	Literature review
2. **How is the liberated electricity market managed?**	Literature review

Source: Own elaboration

The table below shows the basic design of the thesis.

Table 2. The design of Thesis

Introductive part
Chapter 1: Introduction
Substantive part
Chapter 2: Liberalization
Chapter 3: Comparison of the competitors
Chapter 4: The consequences of liberalization
Conclusive part
Chapter 8: Conclusion

Source: Own elaboration

The above figure illustrates the research design for this paper. The first – introduction part – gives the reader an introduction of the research context of the thesis, states the purpose and justifies the problem and its sub-questions. Also, it gives an indication for the background of the topic and case used in defending the research. The substantive part consists of chapters: liberalization, comparison of the competitors and the consequences of liberalization.

3.3 Ontology

Ontology concerns the nature of what exists to be investigated. The theories in ontology consist of being and theories that creates reality. (Lewis-Beck, et al., 2004) In other words, it means the *being* and *study of* the nature of reality and truth. It clarifies the researcher`s position about the nature of existence in science, the implicit or explicit assumptions that are undertaken. (Lewis-Beck, et al., 2004) In social science, ontologically the paradigm is to see the reality subjectively. Reality is explained as a product of individual consciousness, what is dependent on and related to a man. (Bryman, 2008) Bryman explains that social reality is an growing process, as subjective experience and an extension of human consciousness. Furthermore, the social world viewed as a dynamic social process created and extended

by individuals involves. Social reality is not seen as a specific sense but is a product of the subjective and objective experience and consciousness of individuals. (Bryman, 2004)

3.3.1 Ontological considerations

According to Bryman (2008), the questions concerning social ontology ground on social entities. The focus in here is whether to orientate on objectivism or constructionism. Objective entities have a reality external to social actors, whereas social constructions are structured from the perceptions and actions of social actors. (Bryman, 2008)

Objectivism

Walliman defines, that objectivism is the belief that social phenomena and their meanings have an existence that is independent on social actors. (Walliman, 2006)

As the business reality is objective, during the process of writing the project the researcher followed the objective ontological position. The social existence consists of rules and orders, which are external to the company. Due to that the company has to convert according to the changes of its environment and adapt to it. The institutions are the organisations that create and change the rules. Furthermore, the institutions represent a social order in that in exerts pressure to the individuals to conform the requirements of the organization. (Bryman, 2008) People are doing the standard jobs that they are delegated to do. They are taught the rules and regulations, which they ought to apply in the mission statement. Objective point of view, there is a hierarchy, rules and regulations. The institutions are in the top of the structure, the company is in the middle and the workers are in the bottom part. Bryman discusses, that the organization is therefore a constraining force that acts on and inhibits its members.

Also, people with different cultural or sub-cultural backgrounds can be considered as significant factors, which is often hardly recognized by traditional cross cultural studies. Cultures and sub-cultures constrain the society because they internalize their beliefs and values. (Bryman, 2008) It is important to understand the potential contribution of multi-cultural as actors in context what they can bring to multinational companies and he complex of collaboration needs to be outlined.

Constructionism

According to Walliman constructionism id a belief that social phenomena are in constant state of changes because they are totally reliant on social interactions as they take place. Even the account of researchers in subject to these interactions, therefore social knowledge can only be interdeterminate. (Walliman, 2006) It is opposite to objectivism. Constructionism sees the culture as an emergent reality in a continuous state of construction and reconstruction. (Bryman, 2008) Bryman also brings out Becker`s suggestion that "people create culture continuously, no set of cultural understandings provides a perfectly acceptable solution to any problem, and people have to solve in the course of every day, and therefore must remake solutions, adapt their understandings to the new situation in the light if what is different about it". (Bryman, 2008) Becker discusses that

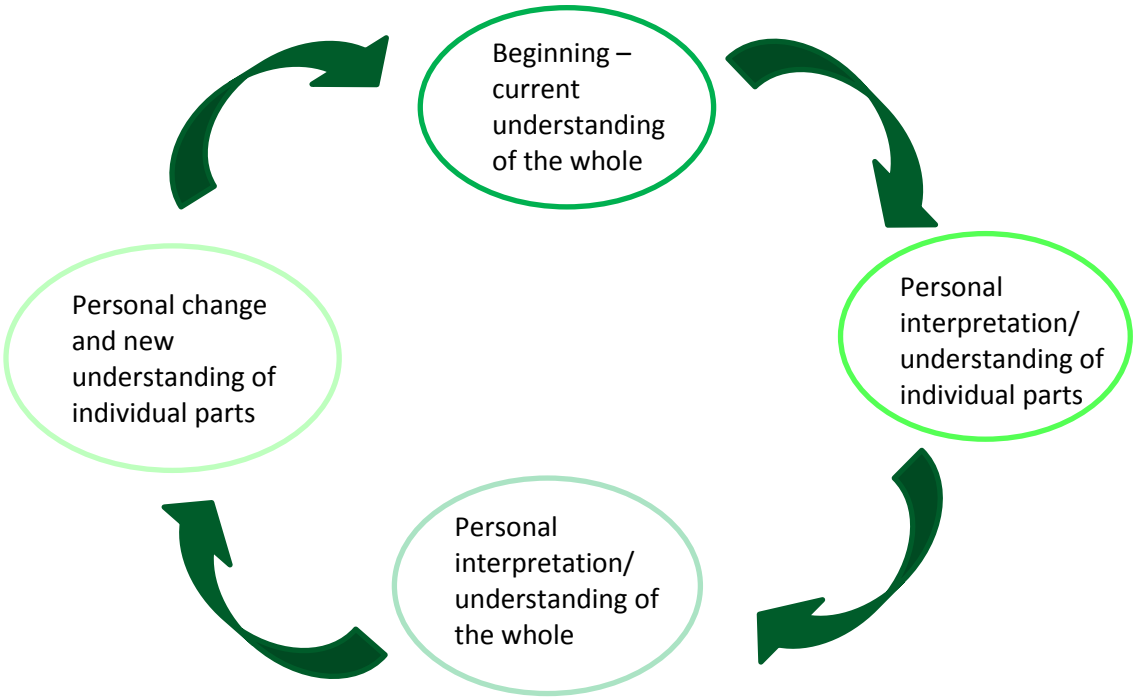
3.4 Epistemological Considerations and Hermeneutical Circle

In the project the researcher used the empirical analysis, which means that the knowledge was gained by emphasizing the role of experience, especially experience based on perceptual observations by the senses. To analyse the case study the author had to use secondary data and investigate the company, EnergyAustralia. In order to apply theories to the case, the researcher needed to study them before. The case presentation provides additional, practical information to the theoretical knowledge gained in the theoretical analysis which enables a conclusion and discussion of the problem statement to be written based on both the theoretical and empirical perspectives. Using secondary data, like journals, books and literature that can be found online and from curriculum helped to make the analysis, as well as the authors own experience and knowledge gained while working for ASAP. Besides find the best theories that would suit the problem statement.

The best way to describe the process of how the knowledge about the research should be understood is the hermeneutic circle, which describes the theory of interpretation. The main idea of the hermeneutical approach is to gather knowledge and understanding through the process that continues to infinity. According to some scholars pre-understanding and interpretation are key features in hermeneutics, which is a scientific philosophy that perceives the way of gaining knowledge and understanding as a constantly continuous process because the interpretation of the phenomenon

changes as more parts are explored. (Dilthey, 1900) In other words, theory of interpretation and understanding that no observation or description is free from the effects of the observer`s experiences, pre-suppositions and projections of his or her personal values and expectations. Hermeneutic is Greek for, interpreter and it was developed by Martin Heidegger in 1927 to envision a whole in terms of a reality that was situated in the detailed experience of everyday existence by an individual. See figure 3.

Figure 3. Hermeneutical Circle



Source: Internet (http://www.google.ee/imgres?imgurl=http://images.quickblogcast.com/7/8/1/5/7/185775-175187/HermeneuticCircle.PNG%3Fa%3D87&imgrefurl=http://hermeneutic.usegrid.net/&h=1241&w=965&sz=162&tbnid=KIsHbLYj0BJI1M:&tbnh=90&tbnw=70&zoom=1&usg=__wsE0wxbjFYwUec8GQO5TKVNPRYU=&docid=UZKTwTa-4mkXhM&sa=X&ei=VIfsUfG3JeSziQfA6oCwBQ&ved=0CEcQ9QEwBA&dur=339) and Wilhelm Dilthey

The circle describes the whole understanding and gaining knowledge for the project. At first the researcher has her current knowledge, which she is going to use for finding the topic, phenomenon and theories. The next step is to gain knew knowledge and understanding by studying new theories and reading extra literature. After this step, the circle leads to the part where new information will be added to the already known and studied understanding. In this report, the hermeneutic approach indicates

that the interpretation of why companies lose their market share and how can they regain their position. Basically the hermeneutical circle is a never ending process and every new research develops new “truths”. With the project she ends this discussion topic and ends the circle, but looking it in a larger picture, it can be developed further and further and the circle keeps on going around.

In this paper the starting point for the hermeneutical circle is the research question. In order to gain understanding about the issue, firstly, is necessary to conduct a market analysis of electricity industry in Australia and follows investigation about the possibilities of new strategies in order to strengthen the position of EnergyAustralia in the market. As the new material peels out during the theoretical analysis, the researcher has to move back and forth in the thesis, likewise described in hermeneutical circle.

Another important feature of hermeneutics is that the researcher needs to identify herself and become familiar with the phenomenon and theories in order to understand it fully. This can also be the reason of the case study, as it allows the researcher to understand thoroughly; how does the liberalization affect the government owned companies.

Because all the facts are already interpreted in some way due to the researcher’s pre-understanding and knowledge, it is not a question, weather the phenomenon is true. Finding the truth is more about being able to discover something new and uncover significant elements of the phenomenon, like looking for the loops in literature and small facts that can be unnoticed. (Sosa, 2002)The validity of truth requires a critical analysis of the collected information that is being interpreted in both the theoretical and empirical analysis. Thus, the problem formulation has to be very clear and understandable, so it can be approached in a critical perspective; the research from inward perspective and understanding the outward, the liberalization concept, if it affects EnergyAustralia Pty Ltd as the literature discusses. Having only a single case study helps to dig deeper into the problem by understand the phenomenas and theories. That way the researcher managed to make a qualitative analysis instead of quantitative, which can be used in case of multiple case studies. (Barzelay, 1993) If there was help also an interview, it would have given more information and probably different results for the problem statement. But for the limited time and availability to the company itself, the researcher has to stick with own knowledge gained from working in the company and the available extensive literature.

Epistemologically, the ultimate presumption underlying an analytical approach is that knowledge is based on facts. The researcher can therefore adopt a neutral position in her study and distance herself from her respondents. In this way knowledge is independent of the individual’s subjective experience and can be generated by formal logical thinking.

3.5 Single Case Study

"Single case study is an extremely valuable method in social science" Barzelay begins his article. Yin defines that "a single case study is an empirical inquiry that:

- Investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident;
- Copes with the technically distinctive situation in which there will be many more variables of interest than data points, and as one result;
- Relies on multiple sources of evidence, with data needing to converge in a triangulating fashion, and as another result;
- Benefits from the prior development of theoretical propositions to guide data collections and analysis." (Yin, 2009)

Saying that, the researcher chose this case study, because she believes that the context of the phenomenon is highly relevant for investigating it. Single case study starts with the designing of logic of the case study and finishes with summarising the case study. (Yin, 2009) The case study method includes many different technical features, for example collecting and analysing data, due to that, in often in reality the context from the phenomena cannot be separated.

In this paper the researcher has used single case study method. There is some criticism when using it, because of the outcome of the study, but also it strongly depends on the case and how it is chosen. Furthermore, a single case study uses multiple methods and sources while researching the problem formulation answer. (Yin, 2009) Also, because of this, the outcome can be viewed in many different ways. A single case study can use the researcher's own pre-knowledge, understandings and logical thinking when solving the problem. It does not matter, if the case is chosen randomly or consciously based on existing understanding of the case study, which obviously can make it easier for the researcher to collect as much information as possible and it depends on the purpose of the paper.

The researcher has chosen EnergyAustralia Pty Ltd case, because of her working history in the company. As she worked there recently, the gained knowledge and observations over the company are rather fresh and therefore more efficient for the paper`s research. Unfortunately, in May 2013 the company

has just closed down the direct marketing strategy line, which means they are not doing so well anymore and refuse to comment on the given topic. Therefore, the researcher was not able to perform an interview with the company, but analyse many articles and literature as well as use her own training course material, while working in EA. The main problem that seemed research worthy was that EnergyAustralia was once owned by the Government, but due to the liberalization is bought as a private company now. There are different points of views of different parties about the change, which will be analysed further in the paper.

The methods of the case study document analysis and literature review will be introduced in the next chapter.

3.5.1 Literature review

Literature review gives an overview of the already conducted research, which gives more aspects to the research problem. (Walliman, 2006) According to Walliman (2006), "the purpose of literature review is:

- To summarize the results of previous research to form a foundation on which to build your own research
- To collect ideas on how to gather data
- To investigate methods of data analysis
- To study instrumentation which has been used
- To assess the success of the various research design of the studies already undertaken." (Walliman, 2006 p. 33)

The review is used to develop the theoretical analysis and it supports the statements made in the paper. Liberalization process has been carried out recently in many countries besides Australia, therefore there is a lot of similar literature found about the topic, but specifically concerning Australian market, it is rather difficult to find. The author had to contact many authorities, who are dealing with the Australian electricity industry, to collect the necessary data for the project. Moreover, there can be found information relating to the topic from various books and scientific articles (also public articles), which all

together makes a large amount of necessary information, to find reasonable results for the research problem. All in all, it is not about the amount of the found literature reviews, but the necessity of it. Walliman (2006) suggest checking if the important issues of the research problem are introduced through the analysis of the literature. It is important to review the background of the research and use this to develop your own problem from it, where the detailed analysis begins. (Walliman, 2006) After the literature is reviews and seen where your problem formulation fits in the topic, the theories behind it can be chosen and the researchers own position can be taken.

The private electricity retailers are the most difficult to find their point of views to the liberalization process, however there are essential reports, that show the results of this issue. Main literature that was used is from the official Australian government sites, National Electricity Market (NEM) and publications from Department of Resources Energy and Tourism. All the chosen literature is selected critically and only the necessary ones are reviewed for this paper. It has been kept in mind that all the data is up-to-date and all the publication dates have been recorded and added to the corresponding chapters. As the process began in the early year 1991, the older documents that are from the beginning of the liberalization are processed with extra care. However, from these publications are the key facts how the process began, but also newer materials are used and compared to confirm that the facts are not modified.

It is important to understand the research design, in order to follow the process of answering the research question.

3.6 Data Collection Methods

There are two different kinds of methods that can be used to collect data in a case study research – qualitative and quantitative. Walliman (2006) highlights that “the essential difference between quantitative analysis and qualitative analysis is that with the former, you need to have compared your data collection before you can start analysis, while the latter, analysis is often carried out with data collection”.

The following table will give a brief overview of the qualitative and quantitative analysis comparison:

Table 3. Qualitative Analysis vs Quantitative Analysis

	Qualitative	Quantitative
Objectives/aim	To understand and interpret social interactions	To test hypothesis, look at cause and effect, make predictions
Type of Questions Asked	• Why? • How?	• How many? • What?
Observed Matters	• Qualities • Behaviour • Complexities	• Quantities • Scales • Trends
Studied Group	Smaller, not randomly selected	Larger, randomly selected
Research Variables	Study of the whole, not variables	Specific variables studied
Data Collected	Words, images, objects	Numbers and statistics
Data Collection Methods	Qualitative data, like document review, participant observations, open-ended questions, interviews, participant observations and reflections	Quantitative data, which is based on precise measurements using structured and validated data-collection instruments: questionnaires, surveys, application forms
Analysis Process	• Explore, explain, understand • Narrative • Particular • Mainly inductive reasoning: conclusions can be drawn from the evidence no matter how incomplete	• Describe, measure, predict • Statistical tables and char • Universal • Mainly deductive reasoning: everything is known before conclusions can be drawn
Results of the Research	Particular or specialized findings that is less generalizable	Generalizable findings that can be applied to other populations
Final Report	Narrative report with contextual	Statistical repost with

	description and direct quotations from research participants	correlations, comparisons of means and statistical significance of findings

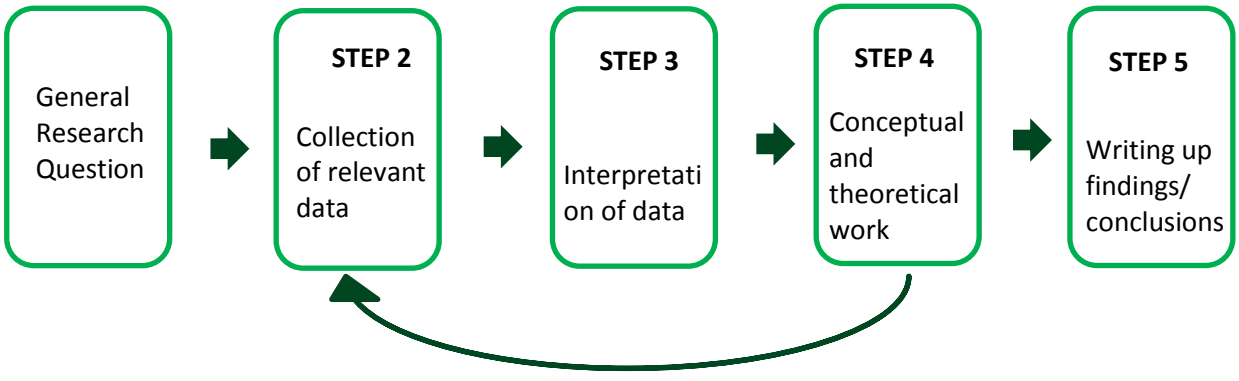
Source:Internet (http://www.slideshare.net/jrdn_27/qualitative-and-quantitative-methods-of-research) and Walliman (2006)

The presented table provides the main differences between qualitative and quantitative research for the reader. From here on, the used method of the thesis - Qualitative Research – will be described more thoroughly.

3.6.1 Qualitative Research

As mentioned before, this paper uses qualitative data, therefore the researcher has to go back and forth between the analysis and the material to understand the whole. (Neuman, 2006) The general outline and process of the qualitative research is described in the following figure:

Figure 4. Structure of Qualitative Research Process

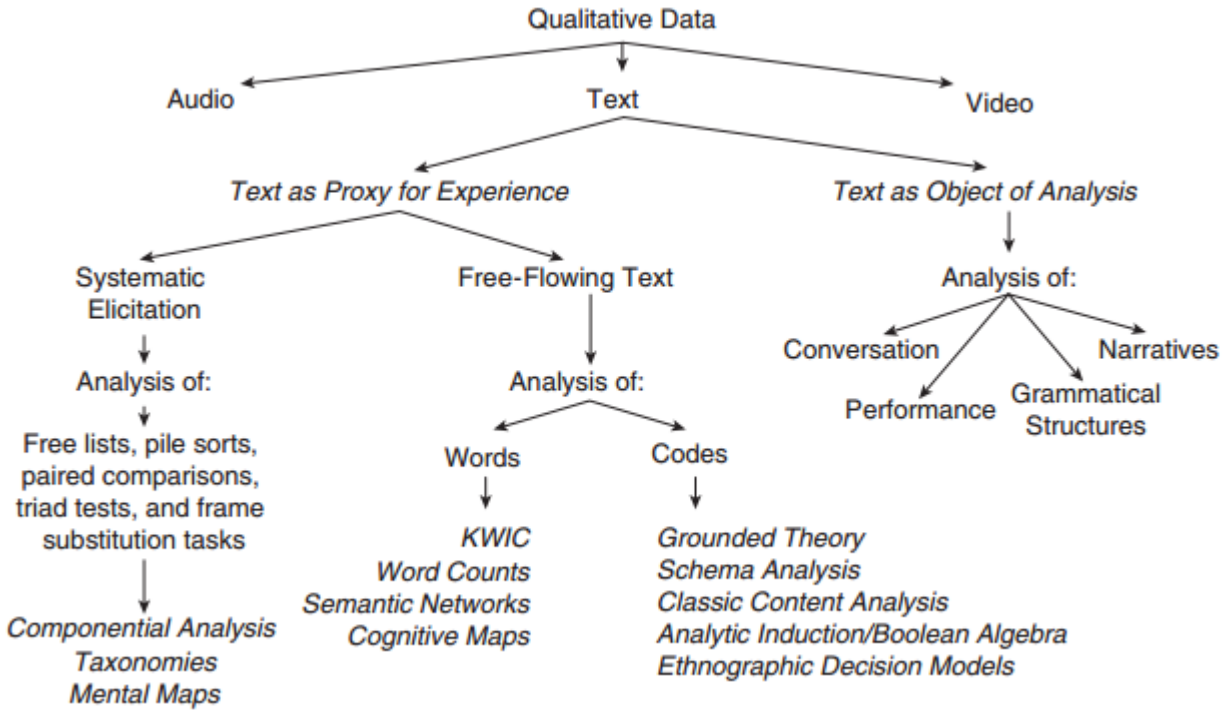


Source: Walliman (2006) and own elaboration

The figure above illustrates the structure of the research process. After generating the research question, starts the collection of the material used for the problem solving. It has to be kept in mind to collect the most relevant literature, to save time and provide most correct conclusions. This leads to the next step, which is to interpret the collected data for the topic selected. Afted the collected data is elaborated; it leads us to the next stage - understanding the theoretic. Bryman (2008) leads back to step 2, to collect more relevant data, which is one of the main highlights of qualitative analysis – return to the material and analysis back and forth. This method ensures that enough material has gained for understand the phenomenon. The final step is a concluding stage, where all the findings and outcomes of the problem will be formulated.

The table, comparing qualitative and quantitative data types is only brief, but to get a better overview of the qualitative research data types, a scholars Ryan and Bernard (2000) have proposed a more descriptive figure, which is illustrated below.

Figure 5. Typology of Qualitative Research



Source: Internet (http://www.sagepub.com/upm-data/48453_ch_1.pdf) and (Ryan, et al., 2000)

Ryan et. al. (2000) suggests that participant observation, in-depth interviews and focus groups are the most commonly used methods in qualitative inquiry. However, they believe that systematic elicitation and document analysis are important and often-used methods in this case. There is data collected for the thesis, which are concerning giving a meaning, rather than giving statistical figures. However, some comparisons and numerical data will be provided in the paper for the competition benchmark, which contradicts the qualitative analysis principle. However, this data is very minimal and does not alter the main research method.

3.6.2 Criticism of Qualitative Research Method

There can appear many problems when collecting qualitative data. Each type of data has different advantages and disadvantages. Generally, qualitative research is thought to be lacking in validity and reliability, however obviously it greatly depends on the data collection method and the data itself. The main advantages is that qualitative data enables to conduct in-depth analysis and counts by recording attitudes, feelings and behaviours, which provides a detailed analysis. Secondly, the method creates openness by encouraging people to open up in topics that were not first observed. Furthermore, qualitative research methods allow creating a detailed preview of their behaviour and feelings about specific issues. Finally, there is a possibility to use quantitative data while doing a qualitative research, it can be investigated why a particular conclusion was made. (Silverman, 2009)

For the disadvantages, as it is a qualitative research method, only a certain amount of people are monitored, yet it makes it more time consuming as the data collection from them has to be in-depth and very thorough than with quantitative data collection method. Therefore it is necessary to narrow the problem formulation down and study a specific topic. Another critic is that due to a small amount of people concerned, it is more difficult to generalize the outcome of the problem question. Qualitative research method is much broader and can be generalized to the rest of the population. Lastly, which is mainly concerning primary data, like interviews, depend on the conductor of the research. (Silverman, 2009)

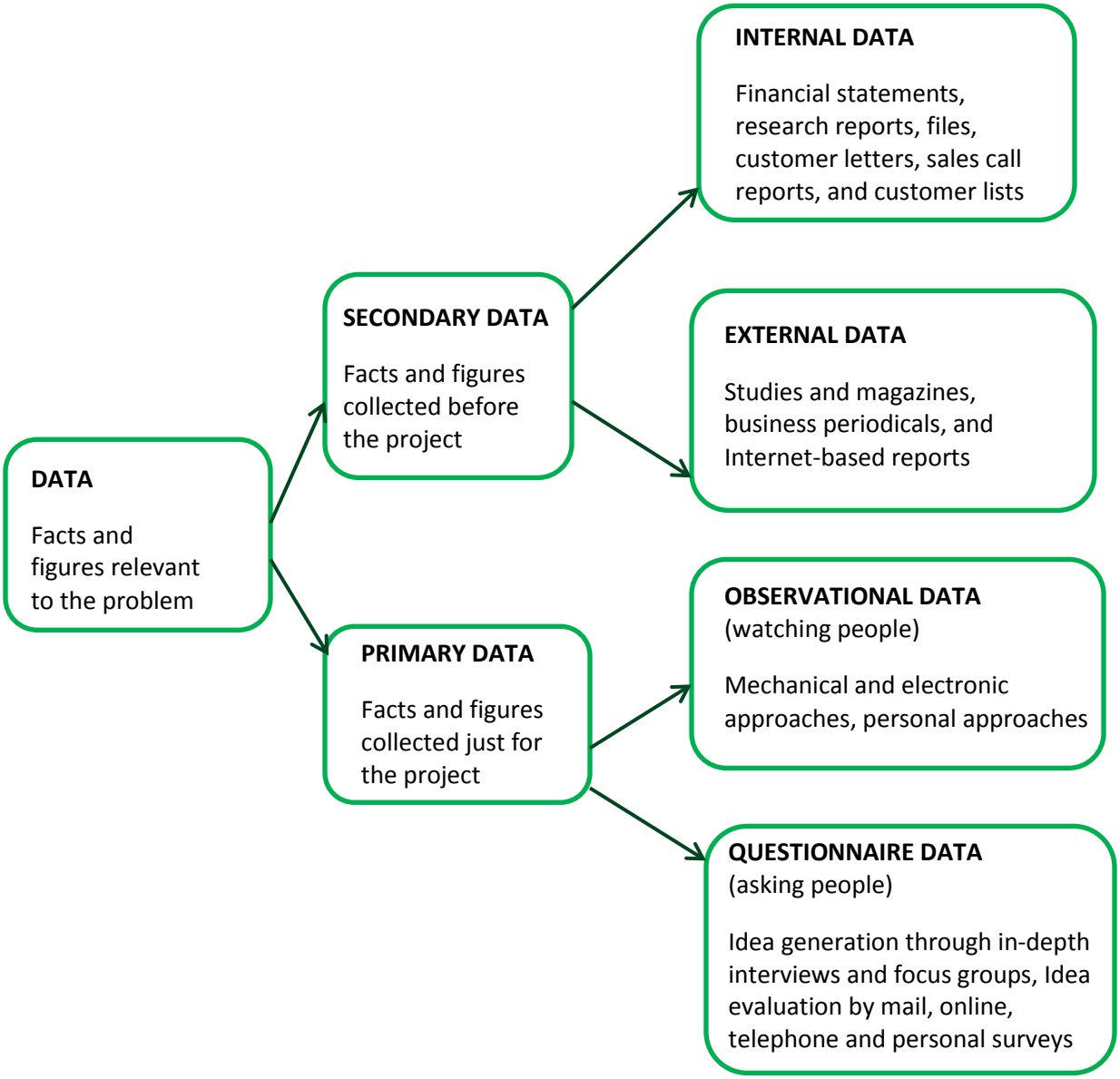
Summarising, these disadvantages and advantages are mainly applied to interviews and focus groups. The assessment of the secondary data and primary data will be developed further in the next chapter.

3.7 Secondary Data in Research

There are several definitions for secondary data introduced by many scholars. One is suggested by Smith (2006) “the study of specific problems through analysis of existing data which were originally collected for another purpose”. In other words, secondary data is a further analysis of an existing dataset with the aim of addressing a research question distinct from which the dataset was originally collected and generating new interpretations and conclusions. (Smith, 2006) Secondary is beneficial, because it can provide data and information that some could not reach otherwise, such as summarized company reports, officially published documents, statistics etc.

Next, an illustration of primary and secondary data will be provided, to get a figurative overview:

Figure 6. Primary vs Secondary Data



Source: Internet (http://www-rohan.sdsu.edu/~renglish/370/notes/chapt08/) and Walliman (2006)

The author uses secondary data, including reports, articles, and publications etc. for data collection method of qualitative research method to address the problems behind the liberalization process for the former monopoly companies. This allows to investigate the history, problems and future prospects of EnergyAustralia Pty Ltd.

As the paper greatly concerns on studying the history of the problem and nationwide study, main amount of the data is secondary. (Walliman, 2006) Walliman mentions that using secondary data like recorded information, it is not produced for specific study, which is neutral to use for a research and interpret your own way for the specific study. In this case, it has to be kept in mind that the cultural differences with the researcher would not play role in the interpretation. Text and information taken from the official sites of the private companies have to be looked with extra critical mind, as they are often with particular message and may be composed to their own benefit. (Walliman, 2006)

3.7.1 Criticism of Using Secondary Data

There are some methodological challenges using secondary data in social science community. (Smith, 2006) It is thought by some scholars about the quality or influential reputation of secondary data. However it has to be kept in mind that it can be said so for some data and how the dataset is collected for the previous purpose. Also, some parties claim that privileging certain research methods, for example, experiments and numerical statistics is more important and they do not understand the evidence-based practice that secondary data enables to conduct. (Smith, 2006) Moreover, there is a lack of qualitative research, but not a need to increase the volume of such research but focusing on more basic qualitative techniques in-depth. In some cases it can be difficult to control the data that was collected for the previous purpose and there can be biases that the researcher might know about. For example, when dealing with the material that was composed by privately held companies. When keeping all that in mind then it all can be avoided, when looking all he literature with critical mind.

3.8 Validity

External validity investigates if results gained from examination of small sample can be generalized at entire population. By study external validity of research, the reseracher would like to verify if it is possible to extend its outcome and treat them as a base for forecasts for all populations. In case of the following project only one company is examined so observations obtained from this study cannot be entirely generalized. Moreover the analyzed business represents only one from many types of liberalization processes – different countries perform the process various ways –perform indirectly. Liberalization is very wide concept and contains many enterprises which have some similarity and some differences. Case company is one example of the company, which operates in the specific industry, retail particular type of product, in particular sates. External environment, internals factors and type of carried activities influence liberalization process of the businesses and cause that they can operate completely different even of some similarities. Obviously some observations can be generalized – the firm has some typical features of the company which can be confront with existing theories.

3.8.1 Internal Validity

Author of the project follow the established tasks. Chosen company is rather big and existed long before the liberalization process, therefore it is good example to investigate. It was the leader of the electricity market before the change, but lost its position due to the problem and now wishes to gain its market share. The company`s situation is a perfect example to study the effects of liberalization and their behaviour after such a resolute change.

3.9 Reliability

The reliability of the research of the effects of liberalization on companies is relatively low, because of using only secondary data. Primary data, such as interview with one of the administration workers would have given more insight to the issue. Researcher uses her own knowledge that was gained when trained in the company by the manager. There is big possibility that if other researchers focus their

interest on another company, from another part of the world with quite similar features their conclusions will be dissimilar to those achieved in this report. There exist some factors that influence examined companies and which affect results of observations. Basically the external environment and features of people created company, their capability and connections, determine performance and behavior of a business.

The theoretical part as well as the practical section in this paper is based on collected secondary data – mainly books, articles and reports. Reliability of these resources is quite high – in many articles and books there are the same observations and the same conclusions. Part of the literature contains comprehensive and developed investigations of many companies in individual reports therefore generalization of observed rules and patterns is reasonable and justified. However, most of the literature in practical part is collected from official organizations that have published the history and current situation of the electricity market in Australia.

The researcher can conduct some quantitative researches and use statistic methods like probability distribution, competitor analysis, company`s situation and statistics, correlation, regression analysis, to explore their subject of interest.

Liberalization can be considered relatively new and still evolving process in Australia. Fast changes can be recognized in the world, companies' environment of operations, because of that it is difficult to create pattern which will describe behavior of all this type businesses.

Because of the significant limitation - not only fund but also time and of willingness of companies to cooperate with students – the author of the thesis will use only one company. Nevertheless, as mentioned before, the company has developed a huge brand name in the market and was the only supplier of electricity before the liberalization, has not kept the same situation after the change. That said, it is a very interesting subject to investigate. By focusing only on one business the deep analysis of such company can be made. Moreover case company in some parts contradicts some observations which are presented in majority of articles and books.

In the paper the researcher tries to find appliance of existing theories to the case. Because of wide framework which theories can be used for analyzing companies for this issue, reliability of conclusions which rose is not that high, but the theories used are mentioned in the concerning literature, which in turn makes the reliability high. The knowledge of the author, her observations, approach, way of thinking and own judgment and moreover her cultural background affect significantly process of

analyzing. However conclusions are reasonable and fit to current world conditions. Company in many cases can be described by existing theories sometimes however contradict them. Moreover, choice of theories considerably influences the investigation. Reliability of this choice is relatively high, chosen theories are very often mentioned in many publications of liberalization of such companies and are so to say flagship theoretical framework for traditional companies.

Furthermore in case of business analysis it is impossible to conduct experiments. Controlled testing and manipulation is not feasible. All researches of this type are based on observations of firm's actions and company`s performances comparison and subsequently generalization of these observations. Researcher cannot test the reaction of company for some impulses.

4 Liberalization

The main part of the paper, which is the practical part, starts discussing the raised problem in the introduction of the thesis. In this section, the author finds the effects of liberalization for EnergyAustralia and their behaviour to the change. At the end of this chapter, the results of liberalization for such companies will be stated. Furthermore the researcher will recommend future research of EnergyAustralia to act further, taking all the factors into account founded in the paper. In the coming section, the author is going to review the literature available about the general process and outcome of the liberalization to similar companies in this position around the world.

4.1 Electricity Liberalization Theory and Practice

4.1.1 The Economic and Political Characteristics of Electricity Markets

Energetics is nowadays one of the economies backbones. As Australia`s and also many other countries, as well as Europe are greatly depending their economy on the electricity policy. In Australia specifically, one of the facts is that the economy`s leader is resourced, primary coal, which provides about 85% of Australia`s electricity production. (Wikipeedia, 2013) The word *liberalization* comes from a Latin word

libertas (freedom) and in economy means reduction of national intervention. Nowadays, it is a general term, which includes deregulation as well as privatisation (in a broader context, also, general market horizontal as well as vertical demonopolization). (Ognivtsev, 2005)

Electricity policy`s one of the main line in the recent decade is electricity market`s liberalization, which main contents is making the industry more effective by competition. Market liberalization in accordance with the principles is one of the most influential economic policy instruments to stimulate economic efficiency and promote the competitiveness of firms. It also improves the efficiency of energy production and the need to look at reducing energy loss. Countries directives require both electricity and gas supply monopolies to be reduced and the impact of new energy producers free access to the energy market, even if the transmission networks are large producers or government possession. (Lessons Learned From Electricity Market Liberalization, 2008) Of course, not everything is perfect in the beginning, so electricity liberalization process has not been perfect in many countries and it has a lot of criticism.

Economy policy`s task is to ensure the social welfare in a situation, where a market cannot do it alone. (Hantke-Domas, 2003) In a micro level, economy`s main action is regulation and the purpose of regulation is public-interest theories of regulation, which is the best possible division of resources for a person as well as to the whole society. (Hantke-Domas, 2003) Regarding the public interest, regulation is a Government way to mitigate market failures. (Fehr von der, 1998) There exist six conditions that are considered as an initiative to eliminate market failures:

1. Natural monopolies
2. Public benefits
3. External influences
4. Incomplete markets
5. Information failures
6. Unemployment, inflation and instability

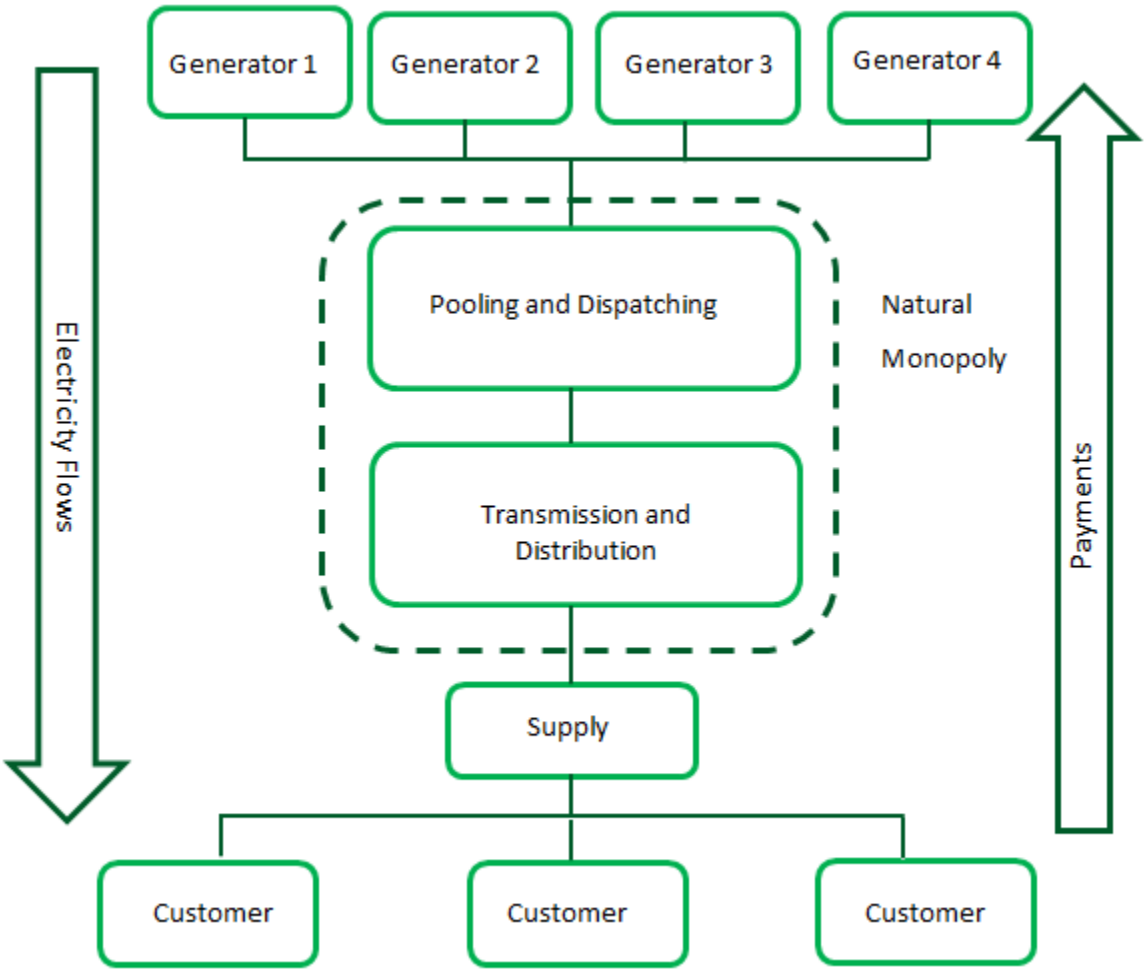
According to Fehr (1998), the regulations to eliminate the market failures, can sometimes be divided into three: economic, social and technical. The economic regulations are implemented mainly in monopoly or in a market where is little competition. Also, the these regulations involve competition policy against intentional competition limitation and natural monopoly`s (cost-)regulation. The external

influences, information asymmetry and from unemployment resulting market failures are regulated by social regulation, which is covered from environment to consumer protection, equal employment opportunities and broader to work condition regulations. Further on, the technical regulation pursues a quality production process.

In the electricity market, from the market failures there exists three. The first market failure would be natural monopoly in a electricity industry's infrastructure or network. It can be defined: a company who is a natural monopoly that has an important tool and other individuals/firms cannot be duplicated for economical purposes and gives the company a leading position in the market. Natural monopolies are characterised as economies of scale and also sunk costs, which case, investments to enter the market will be partially lost when exiting the market and causing a market failure.

There is three continuous links in electricity market: generation, transmission and distribution. For example EnergyAustralia`s supply chain was explained in chapter 1.2.1, in here the author will describe the overall electricity industry system in case of monopoly companies. Transmission means long distance transportation of electricity. On the other hand, distribution is a low voltage electricity transport through local networks. Klein (1998) has developed and illustrated structure of the electricity market structure. (Klein, 1998)

Figure 7. Structure of Electricity Market



Source: Klein (1998)

Electricity Transmission and distribution are both fields of natural monopoly, therefore they need Government interference. All this is primary in the form of network services price control, under supervision, so that all the parties have been ensured equal access to transmission and distribution networks. Here we will arrive to the point where vertical integration has controversial role, which will be examined further in the next section.

Secondly, market failure is considered electricity`s security of supply as a public object of utility. The security of supply does not only mean the physical existence of electricity but also the backup capacity existence, which enables to use electricity in case needed. In everyday life, we all depend greatly on electricity; therefore interruptions in electrical system can cause serious economic and social damages. (Fehr von der, 1998) By saying that, a lot of other economic sectors depend on electricity and without it there is a huge risk in the country`s security. Due to that, the Government has to interfere in the industry, to look after the demand even in the peak times.

Thirdly, another important market failure is external influence. Namely, generating electricity there is a lot of pollution to the environment. Again, the Government needs to interfere (tax, fine, emissions trading, different norms and standards), which give the external influencers obligation to compensate caused damage. For example, nowadays there is a lot of discussion about global warming all over the world, and Governments try to limit the amount of emission with these regulations. For the electricity companies, it means raising the prices or alternatively decrease the emission, which however also cause expenses.

Next you will see a table, which summarises the market failures and actions to eliminate them.

Figure 8. Market failures occurring on the electricity market and national measures against them

Market Failure / Action	Natural Monopoly	Public Object of Utility	Negative External Influence	Deliberate restrictions on competition
Import	-	-	Prevention of dumping	International agreements
Production	-	Initiatives to ensure the security of supply	Actions to restrict pollution	*Ex post* surveillance
Transmission and distribution	Network service price control *ex ante*	Initiatives for universal access	-	*Ex post* Vertical distinction
Retail	-	-	-	*Ex post* surveillance

Source: Own elaboration

The successful factor in the liberalization of electricity market is considered a creation of a well-functioning regulation for natural monopolies and lately also the distinction of different actions. (Aune, et al., 2008) However, vertical integration and distinction problem has given reason to have thorough discussions. In the next chapter is going to look at the vertical integration issue more in-depth.

4.1.2 Theory of Vertical Integration

Vertical integration is a phenomenon, which value chain of one object of utility is owned by one company, from production to retail. In a context of electricity, for example, a vertically integrated firm mines coal, generates electricity and delivers it to the end user (customer).

One of the pioneers of investigating vertical integration is Ronald H. Coase. In 1937, he published an article, where he for the first time dealt with leading the division from market to the company in terms of transaction cost. Coase raises a question, if it is expedient to transfer all the production to one company, when it is possible to get rid of the market transaction costs and all in all make the production cheaper. He came to a conclusion that when the company grows, the entrepreneur can be faced by a negative scale effect, in other words, the additional transaction costs within the company can rise. Secondly, the entrepreneur might not place the production inputs, where their value was the highest, in other words, the production inputs will not be able to use as efficiently. According to Coase, growing the company is necessary, when:

- Organisational costs are smaller than market costs and these react more slowly to the growth of organisational transactions
- The entrepreneur will make mistakes less likely and the likelihood of these errors decrease faster comparing to the organisational transactions
- The costs of production inputs in one company will fall with the growth. (Coase, 1937)

One of the developers of transaction cost theory, Oliver Williamson, explains why firms companies vertically join and cooperate. He refers to partnership specific investments, which in short-term contracts create high transaction costs, in case of long-term contracts in turn increase the other half of the contract`s power and contribute to their opportunistic behaviour. To avoid these problems, it is reasonable to join the contract partner, in other words, vertically integrate, so that the next transactions will be taken place within a single company. (Williamson, 2005) Furthermore, this kind of arrangement is important in the perspective of coal miners and power plants, that vertical integration contributes irreversible partner specific costs. Joskow (1985) has given an example of mutually specialized assets, where both transaction parties have made specific investments, and through which the value of assets is the largest when using them together. (Joskow, 1985) Power plants need coal mining and the other way round. The breaking of cooperation would mean huge costs for both parties.

EnergyAustralia Pty Ltd, was also an vertically integrated company and a natural monopoly. There have been outlined some conclusions, why vertical integration is beneficial by Holger Bonus (2004):

- The maximum demand of mechanical competition can in turn conserve the market power, cooperation and agreements can contribute the competition;
- Vertical integration can free from transaction specific commitments and with that also from market power;
- Vertical integration can lower the process; for example losing the dependency of some retailers can eventually lower the selling prices;
- Even with a many providers from the starting-point can cause a compulsory situation with one partner, when the partner has collected transaction specific knowledge;
- The regulation of business partners can be economically justified, for example the retailers obligation to the industry can result from the producers wish to supply the customer with a prestige product;
- The cost discrimination can be justified, when it is taken place over a long-term cooperation, for example individual cost reduction is justified in case of long-term supply contract;
- Arrangements can increase the competition, for example strategic alliances often maintain or even boost international competition. (Bonus, 1986)

Vertical unbundling ensures equal opportunities for independent firms and removes the centralised decision-making process, which are not vertically integrated. (Lessons Learned From Electricity Market Liberalization, 2008) To unbundling the integrated companies should not favour retailers, who used to be in the vertically integrated chain. The network operator motif will disappear and therefore unbundling contributes competition. Discrimination can occur though cross-subsidisation or through something that is not directly connected to tariff, for example publication of market-sensitive information of related parties. Niellsen and Politt have made a research of vertical unbundling influence on economy in New-Zealand. They raised a hypothesis, which the competition in the market will raise after using vertical unbundling. The results showed that the number of companies operating on the market fell and concentration increased significantly. Retailers cannot operate on the market without backup of specific producer. (Niellsen, Pollitt, 2008)

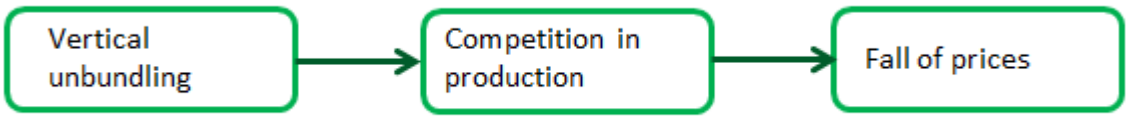
Scholar have argues that vertical unbundling changes the unit operation more effective and lowers the costs. Vertical unbundling enables the companies to reduce operating costs through the scale of economy and consolidation. Again, in the research made in New-Zealand showed that the cost marginal have been increased up to 60%. This shows that even though there is decrease of general network services operation costs, it does not make the cost cheaper for the consumer. (Armstrong, et al., 2005) Armstrong and Sappington have come to a conclusion that vertical integration increases retail costs. However, the outcome depends on the cost-efficiency of the secondary market and to a extent which the scale effect is possible to be forwarded to the consumer. (Armstrong, et al., 2005)

As a result of the market liberalization, vertical integration amongst consumer will occur, in other words, many industrial consumers establish power plants for their own use, in order to reduce the dependence of the price volatility and to ensure the security of supply. (Trevino, 2009) Furthermore, it is possible to eliminate transmission costs and gain synergy of cogeneration.

Scholar who support vertical integration highlight primary economic effect, that cause cheaper end-cost for the consumer, compared to privatised company`s offered prize. When here is a goal to set as low price as possible, then it would be wise to choose vertical integration. Especially when it is been dealt with successive steps of monopoly to avoid double marginal effect. One of the premise of creating competition is vertical unbundling, although it may bring short-term price raise. To create competition, many producers are necessary.

To sum up, the following model can be generated: for the success of liberalization, vertical unbundling is necessary, which creates premise for the creation of competition and the reduction of concentration, which should lower the prices.

Figure 9. The simplified model of the electricity market liberalization



Source: Own elaboration

Vertical integration is considered as the main obstacle of opening the market and the creator of competition problems. It is important to prohibit vertical integration, in other words, the requirement to distinguish generation, transmission and retail.

4.1.3 The objectives and management of electricity market liberalization

Before the liberalization process in Australia, the electricity sector was a vertically integrated state owned natural monopoly. (Lessons Learned From Electricity Market Liberalization, 2008) Already in 1980 various inefficiencies in electricity industry were spotted and initiatives were taken. Although, the liberalization process started effectively in 1991, when the Commonwealth Industry released the first draft report. The changes where developed from ideas to decrease the "size" of the country: the government enterprises started to privatize reduced the government's part in regulating private sector giving the country a competitive role. From the same idea the liberalization of electricity market process began, in order to increase the effectiveness of the government enterprises

The aim of electricity sector is to ensure the effective allocation of resources and the firm`s inner efficiency through competition, privatization and price mechanism. Electricity industry liberalization is above all removing barriers to build competition and increasing the sector`s efficiency through

competition. With reforms there is usually resulted building competition in generating electricity, the formation of organised electricity markets and electricity production, electricity transmission and electricity retail separation of activities. (Lessons Learned From Electricity Market Liberalization, 2008) The new institutional restructuring aim is to bring long-term profit for the society, which ensures a situation, where the important part is that the profit will be delivered through the electricity price, which would reflect the costs of electricity supply. (Lessons Learned From Electricity Market Liberalization, 2008)

The main profit would result in the competition in generation. (Pollitt, 2007) As the production is 65% of the sector`s value, therefore the growth of effectiveness is based on the competition. The growth of effectiveness comes mainly from two facts: cost savings, which occurs from the result of dealing with assets more effectively and the choice of cheaper technology when constructing new manufacturing capacity. (Pollitt, 2007)

There are many recommendations for the electricity market reforms form several organisations and scholars. Firstly, it is recommended to distinguish vertically integrated monopolies as independent units (generation, transmission, distribution etc.) and then open all the potentially suitable areas to competition. Furthermore, the Government has to change from the manager and operator of assets to energy policy implementer and regulator. To carry out the social and environmental policy, there has to be used methods that would not damage the competition that can be seen through, aims to a specific goal and minimises the market failures. For the consumer interests and possible anti-competition behaviour prevention, there has to be used a sector wise regulator. The Government has to build a clear, understandable and transparent regulatory framework. There has to be created a total autonomy of regulators, financial transparency and competency. Also, it is suggested to create a regulative and legislative framework before privatization to build a competition.

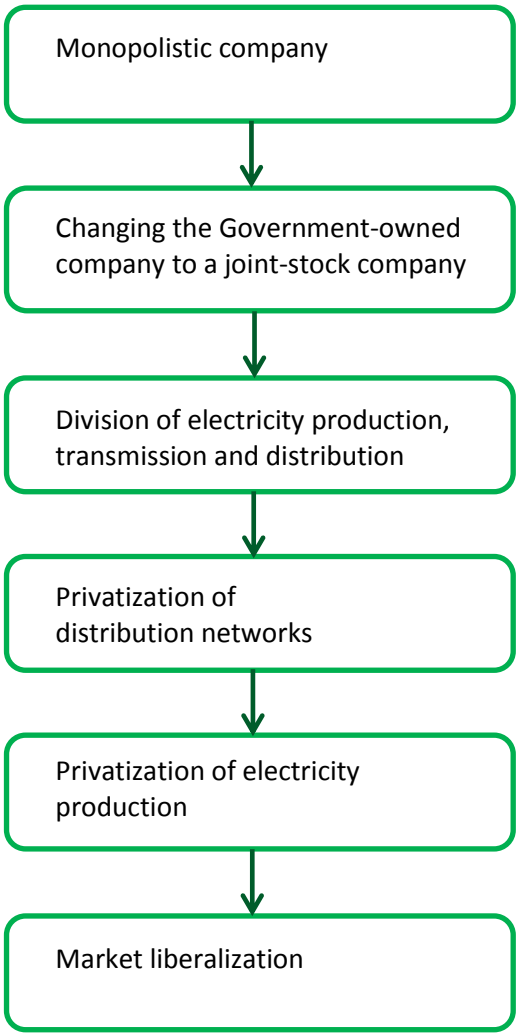
Joskow suggests the following stages as a standard process of liberalization:

1. Privatization of state-owned electricity monopolies;
2. Vertical unbundling of the potentially competitive activities;
3. Horizontal reconstruction of the production segment , by dividing the production units from one another;
4. Horizontal integration of the transmission networks and the creation of one system operator;

5. Creation of the electricity bourse; the facilitation of economic trade between producers and consumers;
6. Developing the active demand-side institutions;
7. Implementing regulative rules for the access of the third parties to the electricity networks;
8. Network service price separation from the retail price. (Lessons Learned From Electricity Market Liberalization, 2008)

In Europe, there has been developed a suggested order of the liberalization for electricity markets, which the researcher will bring out as a comparison to the Australian market.

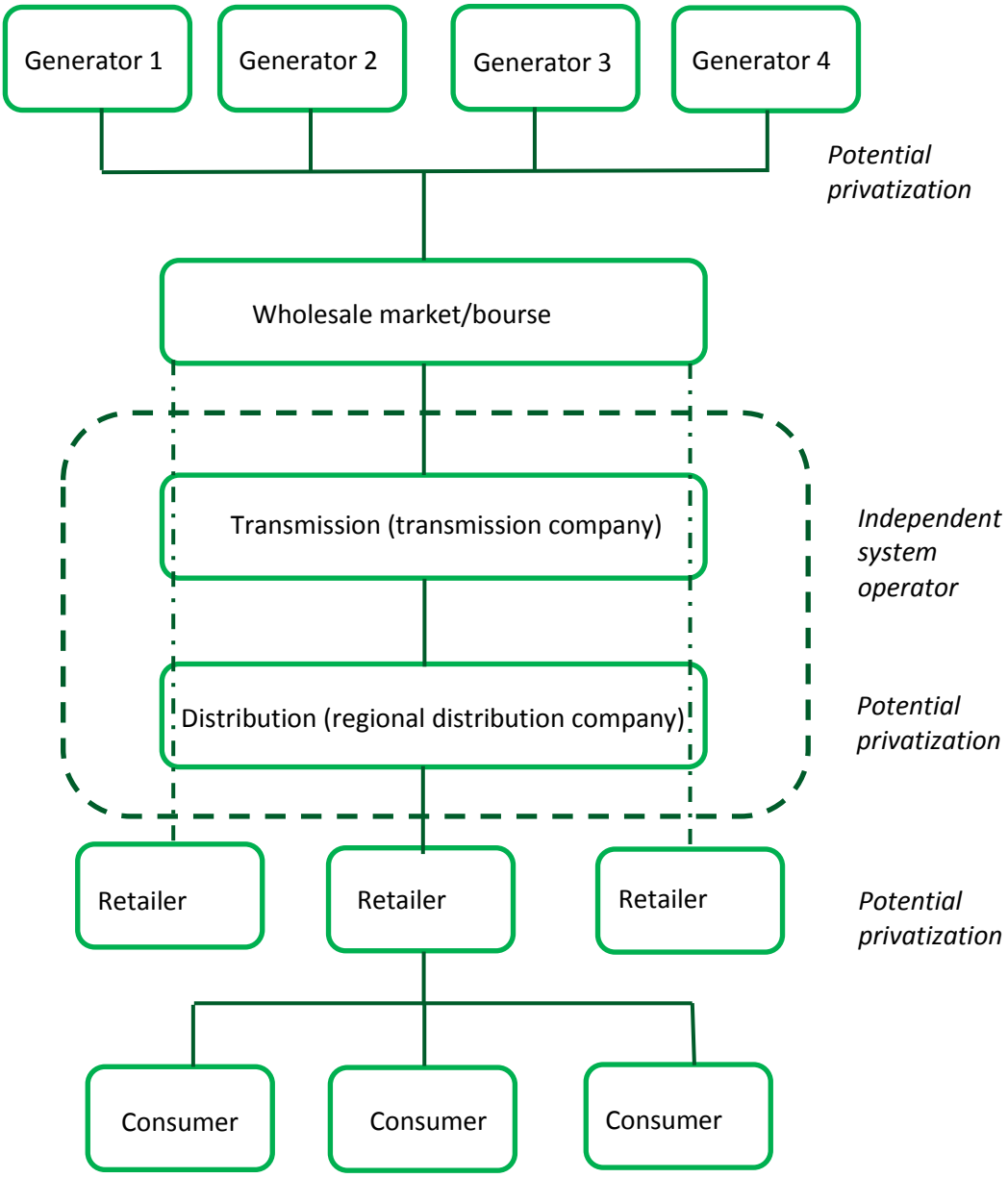
Figure 10.Recommended order of electricity market reform



Source; Own elaboration and Klein 1998.

To sum up, the structure of liberalized electricity market is shown on the figure below.

Figure 11. The structure of a liberalized market



Source: Klein (2009)

Generation, Transmission and distribution is vertically integrated. New link is distribution. Potentially competitive segments are wished to privatize, the natural monopolies have to be regulated by the Government.

Based on different scholars, included already referred ones, who have published articles on liberalization of electricity markets have highlighted the following conclusions on liberalization of electricity markets:

- Vertical unbundling is necessary to create competition on the electricity markets. In short-term vertical unbundling creates the raise of price. In long-term vertical unbundling should build competition and through that also the fall of price.
- To create successful electricity reform a proper market structure is inevitable. There should be average of 5 suppliers. Only counting on new entrants does not ensure the reduction of the old ones market power.
- As a result of the liberalization, the biggest problem would be concentration, that causes reduction of competition on the market. With market power should be dealt ex ante not ex post, therefore all kinds of transpositions and accessions can be prevented, that can cause huge concentration on the market.
- As a result of liberalization, there is no automatic reduction of the prices. The benefits of liberalization are not transferred to the consumers by cheap price, because reforms have not been adequately implemented or not as correctly as they should have been. Especially concerning home consumers and small consumers.
- The application of liberalization reforms is complicated and can cause costly problems, especially in security of supply.
- Investment into new manufacturing capacity and transmission is not sufficient and is still remaining a problematic field in liberalized markets.
- Independent retailers are no able to exist on market without a generator`s backup.
- The motivation of industry consumers is increasing to build power plants for their own use.

In practice the liberalization of electricity market does not mean automatically the privatization of Government owned monopoly. Often only some stages described above are used.

Sometimes there can be mistakenly thought that the purpose of liberalization is the total removal of regulations and creation of free competition, where the market regulates itself. The liberalization of electricity market is primary procedures designed to ensure competitive production and retail, although the transmission and distribution in natural monopolies is still necessary. Also, the regulation in liberalized markets should ensure the security of supply as a public object of utility. The issue of the security of supply cannot be given to the hands of the emerging market offer and the object of demand. Therefore regulation is the result of liberalization as well as a necessary prerequisite. There are usually constant changes in the regulation creating uncertainty on the generators and that can cause insufficient investments in new generation capacity.

The Australian policy creators have liberalized the electricity market also to reduce the prices for the end-user. However in the condition of the liberalized market, the investments for the generating capacity have become more risky, therefore the private sector investments have been reduced and that is all to the uncertainty of the future of the liberalization process. (Lessons Learned From Electricity Market Liberalization, 2008) Furthermore, in the last decades the companies have grown, however it cannot be said to all. Nevertheless, electricity market is getting more concentrated, which is the opposite purpose of liberalization (increase effectiveness through competition). That can cause situations, where market has dominating firms and create monopolistic prices.

Next the researcher is going to describe the outcome of the liberalized markets, found in the literature. Further down to the end of the project, EnergyAustralia`s case will be compared to the literature above.

4.1.4 The effects of Liberalization

There firms who used to be in a naturally monopoly position have described, to bring as a comparison, the liberalization of electricity markets has not been easy. The main gaps have been noted:

- Regulated prices prevent the new entrants from the market;
- The insufficient unbundling of transmission and distribution system does not insure their independence;
- The new generators entrance to the market is discriminated, especially concerning priority access, which will be given to the network companies` long-term contract partners;

- Regulatory powers are insufficient.

Furthermore, in addition to the mentioned problems, there have been noted different characteristics:

- excessive concentration;
- strong vertical integration (especially network and supply operation insufficient unbundling);
- insufficient connections between countries;
- little transparency.

Due to these shortcomings, there have been recommended points to gain the set goals – sustainability, competitiveness and supply secure. This means to reconstruct the policy action plan by these suggested points:

- needs of infrastructure and diversification of energy sources;
- external energy relations;
- oil and gas reserves and their crisis management mechanisms;
- effective use of energy, in other words energy efficiency;
- the use of country`s indigenous energy resources.

There is another energy package to compare the liberalization effects, according to Europe Comission (2006), which suggests:

- requirement of the transmission ownership unbundling;
- state ownership provisions;
- prohibition of third-country companies` participation in networks;
- activities to strengthen the independence of regulators and provisions;
- promotion of association investments;
- the rights of the consumers (measuring data, change of supplier);
- requirements of maintaining measuring data ;

- the distribution companies have to clearly distinguish their activities from other activities.

5 Comparison of the competitors

This paragraph highlights the three market leaders of Australia`s electricity market, by bringing out their main figures according to reports from MarketLine. After this paragraph, the reader will have a good overview, who are the market players, EnergyAustralia deals with.

The following companies are the major competitors of EnergyAustralia Pty Ltd:

- AGL Energy Limited
- Australian Power & Gas Company Limited
- Origin Energy Ltd (MarketLine, 2013)

Table 4. Competitors of EnergyAustralia

Electricity Supplier	EnergyAustralia	Origin	AGL
Year Founded	1995	2000	2006

Source: Marketline, 2013

5.1 EnergyAustralia

The company operates an electricity network of around 22,275 square kilometers distributing electricity from Waterfall, in Sydney's south, to Auburn in western Sydney, and the upper Hunter Valley in the north. EnergyAustralia has 1.6 million network customers in both rural and urban areas, including small to large businesses and industries such as mining, shipping, tourism, manufacturing, and agriculture. It

has more than 1.4 million electricity and gas accounts in NSW, Australian Capital Territory (ACT), Victoria, and Queensland. (MarketLine, 2013)

The company recorded revenues of $4,202 million in the fiscal year ending June 2011, an increase of 2.3% compared to fiscal 2010. Its net income was $337 million in fiscal 2011, compared to a net income of $253 million in the preceding year.

Table 5. EnergyAustralia key financials ($)

$ million	2007	2008	2009	2010	2011
Revenues	2,982.3	1,196.0	3,446.9	4,109.0	4,201.5
Net income (loss)	268.1	276.7	238.5	252.9	336.5
Total assets	10,302.7	8,176.6	9,237.2	10,671.5	11,634.6
Total liabilities	6,700.3	6,179.4	7,377.8	8,756.5	9,642.6
Employees	5,185	5,389	5,649	5,908	6,067

Source: Marketline, 2013

Table 6. EnergyAustralia key financial ratios:

Ratio	2007	2008	2009	2010	2011
Profit margin	9.0%	8.7%	6.9%	6.2%	8.0%
Revenue growth	(10.0%)	7.2%	7.8%	19.2%	2.3%
Asset growth	52.0%	(20.7%)	13.0%	15.5%	9.0%
Liabilities	34.0%	(7.8%)	19.4%	18.7%	10.1%

growth					
Deb/asset ratio	65.0%	75.6%	79.9%	82.1%	82.9%
Return on assets	3.1%	3.0%	2.7%	2.5%	3.0%
Revenue per employee	$575,188	$593,065	$610,177	$695,500	$692,518
Profit per employee	$51,705	$51,338	$42,213	$41,809	$55,470

Source: Marketline, 2013

5.2 Origin EnergyAustralia

The company operates in Australia, New Zealand, and other countries in the Pacific region, including Papua New Guinea, The Solomon Islands, Fiji, Vanuatu, Tonga, Samoa, America Samoa, and the Cook Islands. Origin Energy conducts its business activities through four core business segments: retail; Contact Energy; exploration and production; and generation. (MarketLine, 2013) Origin Energy conducts its business activities through four main business segments: retail, Contact Energy, exploration and production and generation.

The retail segment sells electricity, natural gas and liquefied petroleum gas (LPG) to more than four million customers in Australia, New Zeland and other countries in Pacific region**.** In 2011, the company sold 34 terawatt-hours (TWh) of electricity to 3.2 million customers, 142 petajoules equivalent (P je) of natural gas to 923,000 customers and 476 kilotons (Kt) of LPG to 365,000 cutomers**.**

The retail segment in Australia also supplies electricity to customers mainly in Victoria, South Australia, Queensland, and New South Wales. The segment also has an electricity trading function, which buys and sells electricity on the spot market or from the National Electricity Market (NEM), a wholesale market

for electricity supply in the Australian Capital Territory and the states of Queensland. The retail segment's trading function buys hedge contracts and enters into wholesale volume arrangements, which helps protect the company and its customers from volatility in the spot market. Origin Energy has 52.8% interest in Contact Energy (Contact). Contact is involved in supplying natural gas and electricity energy related products and services in New Zealand. Contact is a wholesale electricity generation company and is one of New Zealand's largest retailers of electricity. It supplies electricity to 447,000 customers, gas to 60,000 customers, and LPG to about 59,300 customers. Contact generates 25% of New Zealand's total annual electricity generating capacity from its nine power stations.

The company recorded revenues of $10,678 million in the fiscal year ending June 2011, an increase of 21.2% compared to fiscal 2010. Its net income was $192 million in fiscal 2011, compared to a net income of $632 million in the preceding year.

Table 7. Origin Energy key financials ($)

$ million	2007	2008	2009	2010	2011
Revenues	6,680.2	8,578.5	8,319.4	8,809.7	10,678.2
Net income (loss)	471.7	533.2	7,165.3	631.8	192.0
Total assets	15,242.4	12,974.2	22,816.1	22,539.5	27,500.8
Total liabilities	9,171.4	7,631.4	11,312.1	10,731.9	13,548.1
Employees	3,386	4,086	4,198	4,392	5,213

Source: Marketline, 2013

Table 8. Origin Energy key financial ratios:

Ratio	2007	2008	2009	2010	2011
Profit margin	7.1%	6.2%	86.1%	7.2%	1.8%
Revenue growth	9.3%	28.4%	(3.0%)	5.9%	21.2%

Asset growth	70.4%	(14.9%)	75.9%	(1.2%)	22.0%
Liabilities growth	48.7%	(16.8%)	48.2%	(5.1%)	26.2%
Deb/asset ratio	60.2%	58.8%	49.6%	47.6%	49.3%
Return on assets	3.9%	3.8%	40.0%	2.8%	0.8%
Revenue per employee	$1,972,885	$2,099,493	$1,981,753	$2,005,862	$2,048,385
Profit per employee	$139,298	$130,506	$1,706,830	$143,847	$36,833

Source: MarketLine, 2013

5.3 AGL Energy Ltd

AGL is an Australian private owner and operator and developer of renewable energy generation. It is one of the largest retail suppliers of electricity and gas in Australia. The company is engaged in the following activities: sale of gas and electricity; power generation and energy processing infrastructure; development of natural gas production facilities; exploration, extraction, production, and sale of coal seam gas (CSG); extraction and sale of liquid petroleum gas (LPG); and extraction and sale of crude oil. AGL offers its services in New South Wales, Victoria, South Australia, and Queensland.

The company carries out its operations through its four segments: upstream gas; retail energy; merchant energy; and energy investments.

The upstream gas segment of AGL is engaged in the exploration, extraction, production, and sale of Constructive Solid Geometry (CSG); and exploration and development of other renewable energy sources (including geothermal). AGL carries out the exploration, extraction, production, and sale of CSG

through its Sydney Basin gas projects, Moranbah gas project, and Gloucester CSG project. AGL's interest in 2P reserves (proved plus probable) of coal seam gas, as of June 2011, was 2,089 petajoules (PJ).

AGL owns and operates two gas-fires peaking plants: Torrens Island Power Station and Someron Power Station. Torrens Power Station is the largest power station is South Australia and the largest natural gas fires power station in Australia. It generates up to 1,280 megawatt (MW) of electricity. Somerton Power Station generates 150 MW of electricity. Furthermore, AGL owns a large scale solar electricity generator and operates several renewable landfill gas and biogas generators across Australia.

AGL's retail energy segment is responsible for buying and selling of gas and electricity. The company retails natural gas, electricity, and energy-related products and services to its 3.3 million customer accounts across New South Wales, Victoria, South Australia, and Queensland. AGL is one of Australia's largest retailers of natural gas. AGL is a retailer of natural gas but does not own the pipeline infrastructure that is used to transport gas to the end customer. AGL sources gas from a number of areas; including: Cooper Basin, Bowen and Surat Basin, Gippsland Basin, and Sydney Basin. The company's merchant energy segment is focused on the buying and selling of gas and electricity. It is also engaged in operating and maintaining of power generation infrastructure; and extraction and sale of liquid petroleum gas.

The company recorded revenues of $7,301 million in the fiscal year ending June 2011, an increase of 7.0% compared to fiscal 2010. Its net income was $577 million in fiscal 2011, compared to a net income of $368 million in the preceding year.

Table 9. AGL Energy Ltd key financials ($)

$ million	2007	2008	2009	2010	2011
Revenues	4,376.0	5,605.0	6,100.9	6,824.3	7,301.0
Net income (loss)	471.8	236.4	1,647.7	367.6	576.8
Total assets	10,826.7	9,758.3	9,326.6	8,971.7	10,009.0
Total liabilities	5,908.4	3,292.0	3,292.0	2,984.4	3,462.6
Employees					

Source: Marketline, 2013

Table 10. AGL Energy Ltd key financial ratios

Ratio	2007	2008	2009	2010	2011
Profit margin	10.8%	4.2%	27.0%	5.4%	7.9%
Revenue growth	9.5%	28.1%	8.8%	11.9%	7.0%
Asset growth	33.1%	(9.9%)	(4.4%)	(3.8%)	11.6%
Liabilities growth	77.3%	(21.8%)	(28.7%)	(9.3%)	16.0%
Deb/asset ratio	54.6%	47.3%	35.3%	33.3%	34.6%
Return on assets	5.0%	2.3%	17.3%	4.0%	6.1%

Source: MarketLine, 2013

5.4 Market share

Market shares are calculated on the basis of retail sales to end-users in all segments.

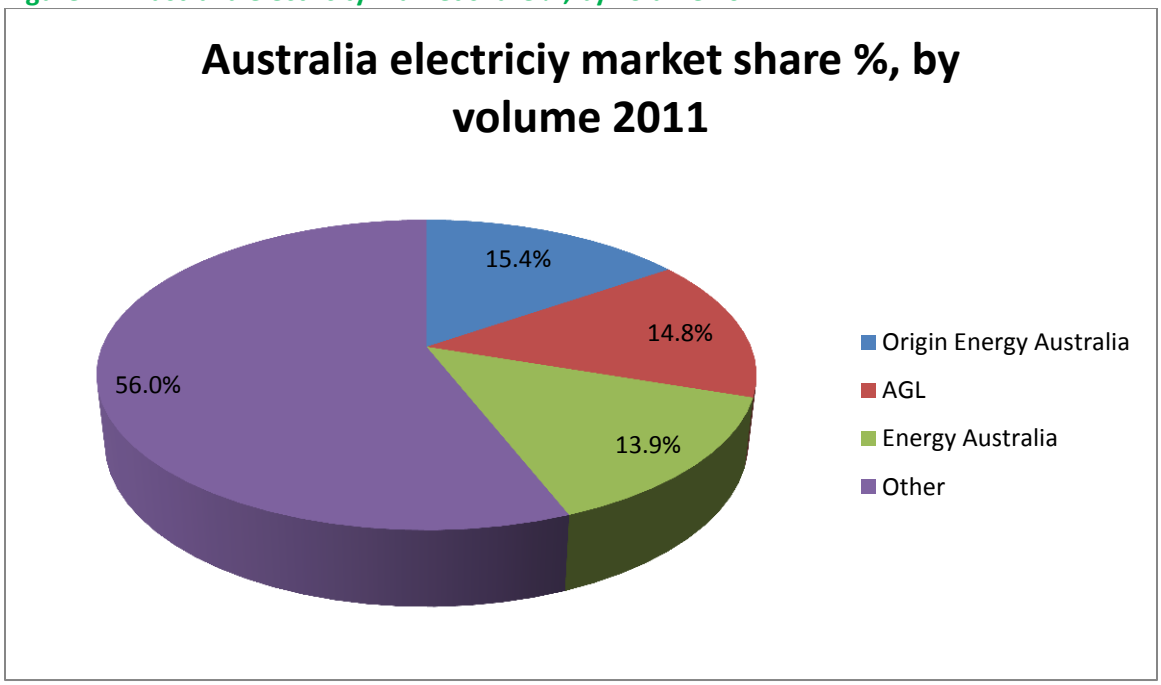
Origin EnergyAustralia is the leading player in the Australian electricity market, generating a 15.4% share of the market's volume. AGL accounts for a further 14.8% of the market.

Table 11. Market Share

Company	% Share
Origin EnergyAustralia	15.4%
AGL	14.8%
EnergyAustralia	13.9%
Other	56.0%

Source: MarketLine, 2013

Figure 12. Australia electricity market share %, by volume 2011



Source: MarketLine, 2013

Market Volume Forecast

In 2016, the Australian electricity market is forecast to have a volume of 223.7 TWh, an increase of 1% since 2011. The compound annual growth rate of the market in the period 2011–16 is predicted to be 0.2%.

Table 12. Market Volume Forecast

Year	TWh	% Growth
2011	**221.4**	**3.2%**
2012	**223.4**	**0.9%**
2013	**223.0**	**(0.2%)**
2014	**223.2**	**0.1%**
2015	**222.9**	**(0.1%)**
2016	**223.7**	**0.4%**
2011-16		**0.2%**

Source: Marketline, 2013

6 The Consequences of Liberalization

This paragraph is describing the effects on vertically integrated natural monopoly companies after liberalization process. Here there is brought examples from the case EnergyAustralia and elaborated more on how the company reacted to such a change. Moreover, the importance of liberalization will be highlighted, by reaching the essence of the thesis.

Australian electricity market is now fully liberalized. Australia took a huge market review on 2002, but did not bring major fundamental re-design on the market. The legislative development in Australia`s electricity market was greatly influenced by the fact that the energy issues were under state Government. The liberalization process was effectively launched on 1991 by the Commonwealth Commission in January 1991.

6.1 Effective companies

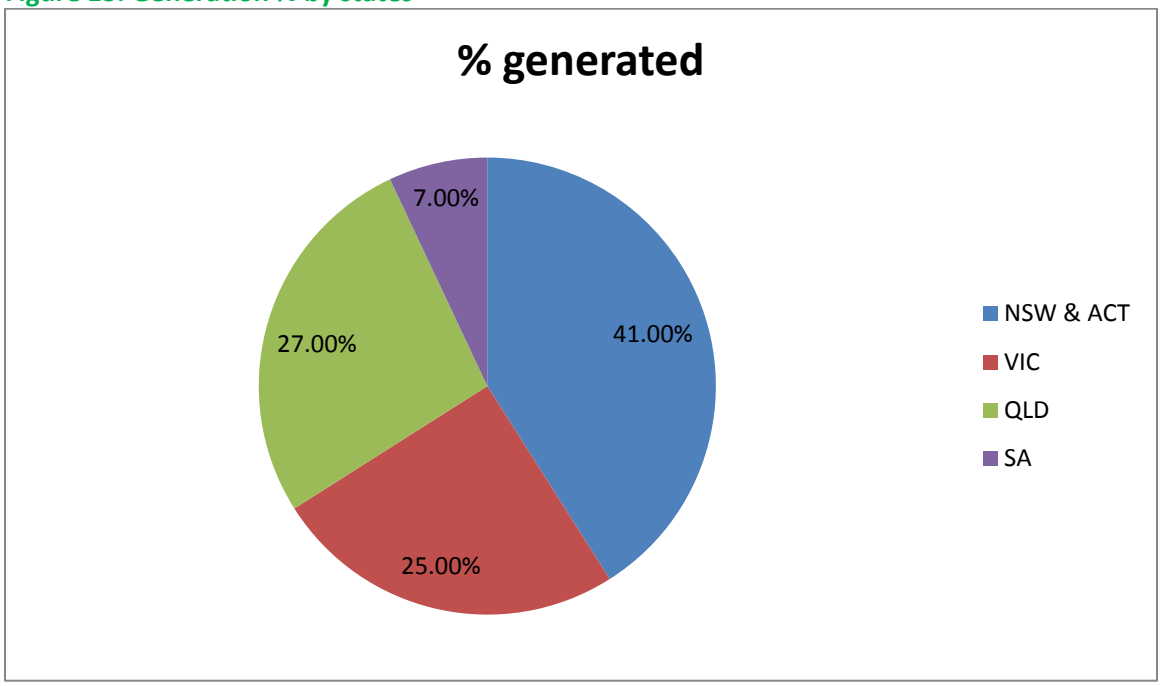
As the electricity market reforms principal is to build competition and privatization, it prompts the companies to grow their efficiency. Therefore the deregulation helps to remain in the market by growing their efficiency and increasing their companies. (AEMO) Moreover, the companies are forced to compete with the other firms in R&D departments, by developing new technology. In Australia solar energy is increasingly used in homes as well as businesses. Overall it is believed that the liberalization

leads to the improvement of productivity of domestic industries. It results in more efficient allocation of resources and greater overall output. The average productivity is raised by tariff reductions and with the exit of low efficiency.

6.2 Market Structure

By 2003 there were 8 million consumers in the National Electricity Market, where 158 479 GWh was supplied. From that 65 TWh (41%) was generated in NSW and the ACT, 40 TWh (25%) in VIC, 42 TWh (27%) in QLD and 12 TWh (7%) in South Australia.

Figure 13. Generation % by states



Source: Lessons from Liberalized Electricity Markets, 2005

91% of the generation comes from coal, 6% from gas and only 3% from hydro power. The reason why the market is strong and now well-organized market, is because of the interconnections of different regions. The generation is still partly owned by the Government-owned as well as private companies.

One of the largest energy retailers in New South Wales was bought by TRUenergy in 2001 from the NSW Government. The company took over EnergyAustralia`s brand name and customers database from TRUenergy. The company is owned by Hong Kong based CLP Group. (EnergyAustralia, 2010) Moreover,

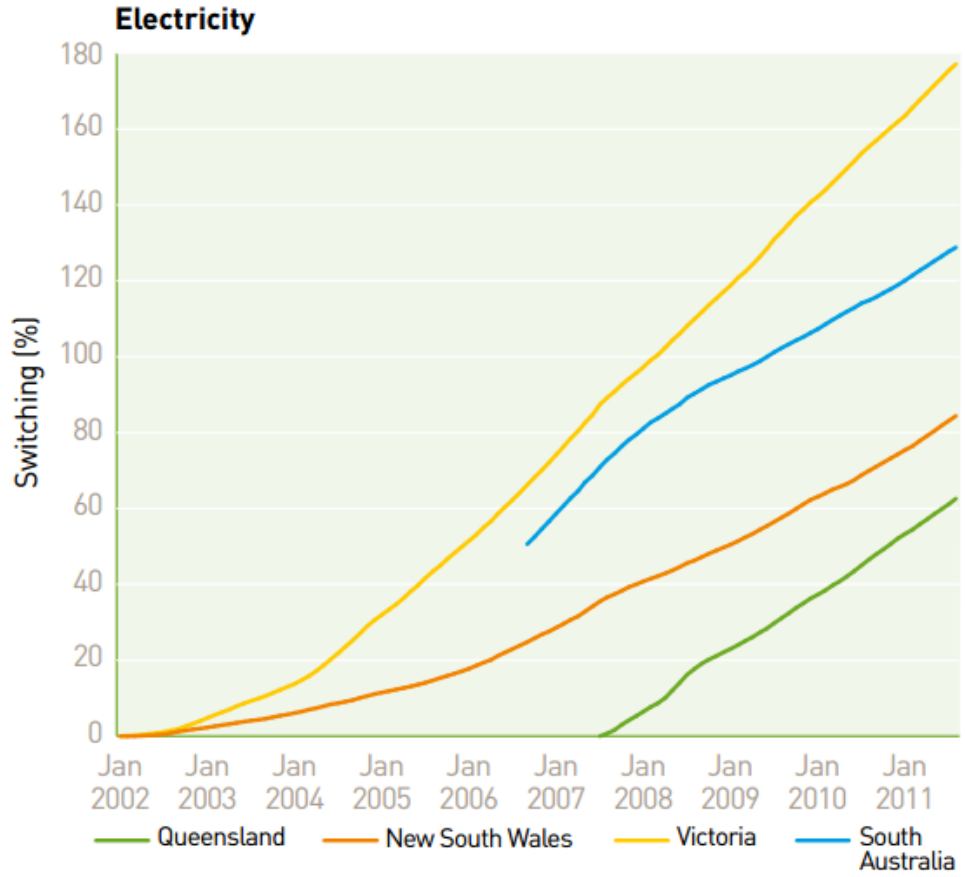
with this acquisition the company has doubled its client base to approximately 2.76 million in the states of NSW, the ACT, VIC, QLD and South Australia. This is can be considered as one of the biggest and hardest changes for the true customers of EnergyAustralia, which was understood while working in the company. They trusted the Government owned company and did not have the need to change over to some other company. As it was sold to Hong Kong company, often customers feel betrayed and feel that the firm is not reliable anymore.

Next the author will highlight some of the figures that show the changes after the liberalization process in electricity market and how the numbers and competition started to turn. Mostly it has been taken into sight the eastern part of the country: the sates of NSW, VIC and SA, which are the main states where EnergyAustralia operates.

6.3 Retail switching

According to the Australian Energy Regulator (2011) in NSW and VIC accordance with 11% and 23% of the customers changed their retailer only during 2005. After the liberalization the customers started to switch from regulated “default” contracts to market contracts. The figure below shows switches made from January 2002 to July 2006 in NSW, VIC and SA.

Figure 14. Cumulative monthly customer switching of retailers, %



Source: Retail Energy Markets, Australian Energy Regulator 2011

It can be seen that the percentage doubles within a year. People are getting more used to the new system and more freely try different retailers as the year goes on. Simply people were not aware of their possibility to change retailers, until Australian Energy Market Operator took over Rule making and released its final report on the new market system. (Regulator, 2011) More and more new entrants are coming to the market to choose from and each of them offers a different benefit to win over the customer. As a result of liberalization, the retailers can manage the risk if price volatility in the electricity market, and reducing the need to participate in the hedge contract. (Regulator, 2011)

The positive aspect is that the rate at which the customers switch their retailer, show their activeness in participating in the market. Comparing to the years when the liberalization process began, the customers are more active. However, this often is not a good aspect for the retailers. Constantly they are facing issues of winning over their new or old customers. The same is doing EnergyAustralia, whose

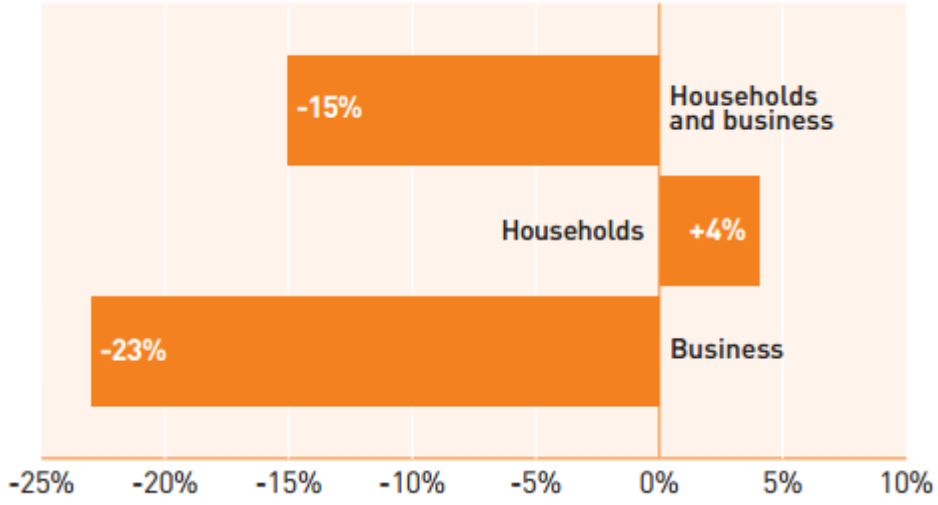
recent offer was 12% discount and $100 credit from the first bill. (2012) While others, for example Origin Energy, who is the energy market leader, offers 14% discount from the bill. The key aspect is the rate. (Origin Energy, 2013) Now the privatized companies can set their own rates and trick the customer over by offering more discounts. Traditionally, the switching is more rapid during the beginning of the process and stabilises after the market is fully grown liberalized. Then customers are more eager to experiment with the new entrants. (Regulator, 2011) Competitive market is said to be low in switching, but according to the statistics, it is relatively high in Australia`s eastern states. Therefore, it can be concluded that the customers have not found a qualitative service that they are pleased to stay for a longer period. In turn, they are unsatisfied and feel the need to change more often as the market is been fully liberalized for years. Furthermore, the research made by the AEMO (2011), explains that almost never is switch made within the same company, but usually change from one retailer to another.

6.4 Retail prices

The retail price includes: wholesale energy, transport through transmission and distribution networks and retail services. (Regulator, 2011) The majority of the electricity bill are the network tariffs (41-51%) and the wholesale energy costs (32-42%) and other (green and retailer operating costs).

The figure below, shows that the retail prices in households have risen 4%, but in businesses fallen 23%, since 1990. This reflects the unwinding of cross-subsidies from business to household customers that began in 1990s. (Regulator, 2011) There can be seen more competition in the business sector. Although there can be found more price volatility in business sector as the households are protected with the contracts and hedging arrangements.

Figure 15.Change in the price of electricity – Australia, 1990-91 to 2005-06



Source: Retail Energy Markets, Australian Energy Regulator 2011

Different market players offer various products with different price structure. There as described earlier, customers can choose different gas and electricity retailers or keep them together which is called “dual fuel” contract. EnergyAustralia`s offer was $100 credit on top of 12% discount from each bill for 2 years. This is what they call the loyalty bonus, or if they already are in a contract with another company, there might be a termination fee which the “loyalty bonus” covers it. Furthermore, the customers can now choose another package which gives more discounts when paying on time or via Internet. All this makes the direct price comparison difficult, because the rates and discounts offered are different. Furthermore, EnergyAustralia as well as its competitors offer fixed price contract, which means that the rate will remain the same for a period of the contract (usually 2 years).

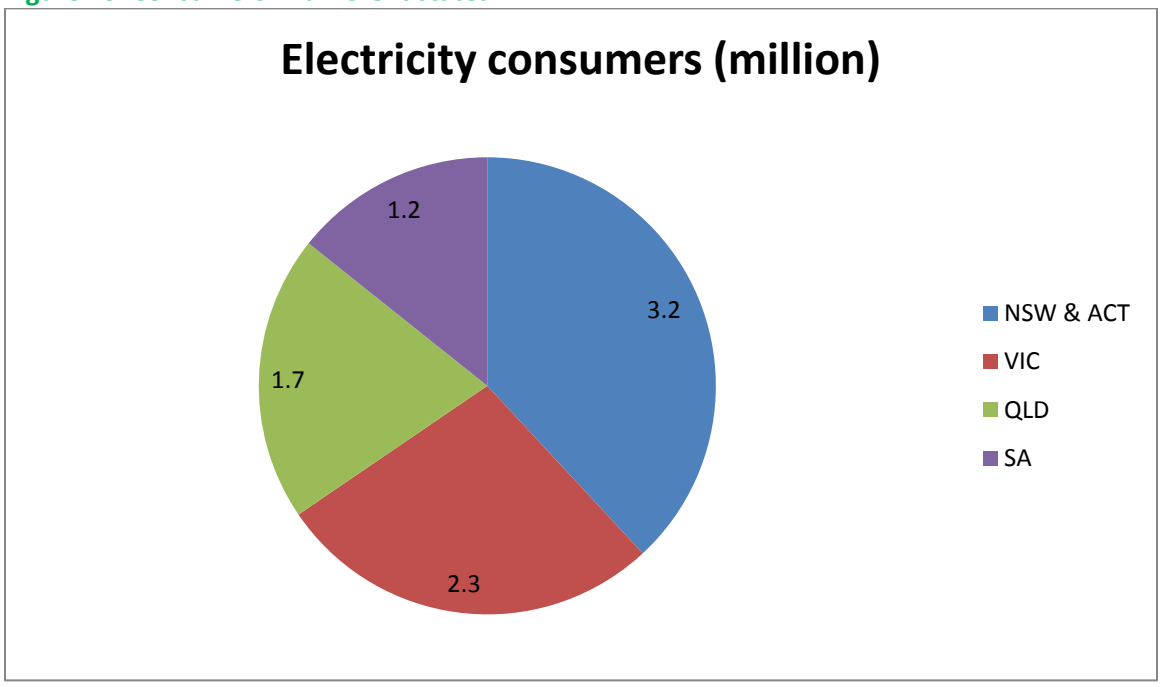
6.5 Competition

The biggest change and importance on the electricity market after the liberalization is competition. It started on 1991, when the Government first started to bring in competition to the electricity market. With that the states were led to legislative reforms, which included unbundling. (Lessons Learned From Electricity Market Liberalization, 2008) After the change the customers have the freedom to choose their own retailer and they do not have to stick to the one they were set by default, in New South Wales (NSW), Australian Capital Territory (ACT), Victoria (VIC) and Queensland (QLD) where EnergyAustralia

operates. (Operator, 2010) This gives the customers freedom to switch between retailers but can be vulnerable to the prices. Still the competition is gradually growing, which makes it more and more difficult for the old players. In 2009, about 6.3 million customers transfers from one retailer to another, which giver a great overview of the retail competition taken place. (Operator, 2010) This widened the eyes of the companies to create new products and offer different benefits to their customers to increase their customer base. MarketLine report concluded that the threat of new entrants is moderate to strong. (Marketline, 2012) Surely the rivalry varies between states and market structure. Secondly, the importance is to secure a reliable energy supply for the public welfare. (von Danwitz) One of the benefits is that before the firms were privatised Australia`s competitive framework was developed. Some states more slowly grew out from the public ownership, which can be said also to the states where EnergyAustralia operates. (EnergyAustralia, 2010)

In 2005 there were 66 retail companies operating in NSW and ACT. By now there is assumed more, but due to strong competition the number is changing constantly.

Figure 16. Consumers in different states



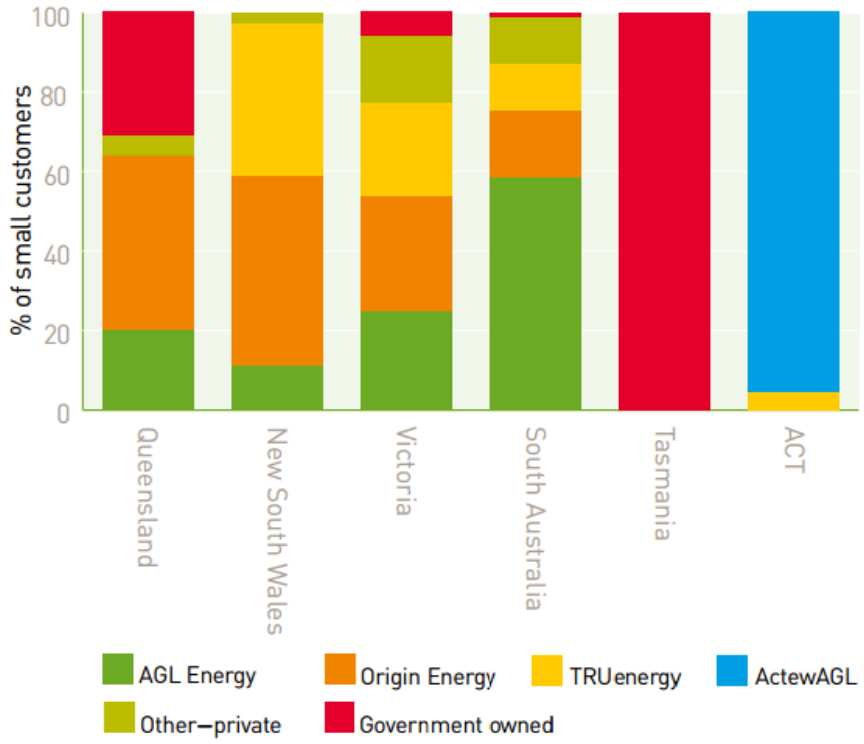
Source: Lessons from Liberalized Electricity Markets, 2005

In 1998, there was a huge demand in the industry, which created a high prices. This in turn lead to serious concern of the liberation process changes and its operations. (Lessons Learned From Electricity

Market Liberalization, 2008) It was so serious, that the Government wanted to interfere, but it did not due to help the process to flow on its own. However, the market has had periods with negative prices, for a few hours every year since the market launch, describes the AEMO. (Lessons Learned From Electricity Market Liberalization, 2008) According to Joskow, electricity has its value to the customer, when it is supplied on the right time, in the right place, in the right volume and acceptable quality. In other words, electricity has to be generated for its consumers in the usable time and right volume, because it cannot be stored for later use if too much is generated. This means predications and total awareness of the market has to be developed.

The figure below gives an illustrative overview of the electricity market share after the deregulation. The three leaders in the states where EnergyAustralia operates are: AGL Energy, Origin Energy and TRUenergy (brand name EnergyAustralia), but still as according to the figure 11, EnergyAustralia is the third behind the other two. AGL is the largest gas supplier in NSW and is looking to increase its market share in electricity. (Regulator, 2011)

Figure 17. Electricity retail market share, 2011



Source: Retail Energy Markets, Australian Energy Regulator 2011

Some customers do not want to keep their gas and electricity bill separately, which is beneficial for AGL`s marketing strategy. While AGL provides cheap gas price and qualitative service, it is easier to change their electricity retailer to the same company, while the company also provides a discount from electricity. (Regulator, 2011)

As the ownership is increasingly in private hands, in Tasmania the Government continues to own the energy retailers.

AGL, Origin and EnergyAustralia joint supply 80% of the energy retail customers and control almost 30% of generation capacity in the mainland regions of the National Electricity Market (NEM), explains AER. (Regulator, 2011) They are considered as the three biggest and leading companies in the eastern Australia`s electricity market, but still the company observed is not the leader.

Figure 18. Active energy retailers, October 2011

RETAILER	OWNERSHIP	QLD	NSW	VIC	SA	TAS	ACT
ActewAGL Retail	ACT Government and AGL Energy		●				●
AGL Energy	AGL Energy	●	●	●	●		
Alinta Energy	Alinta Energy						
Aurora Energy	Tasmanian Government					●	
Australian Power & Gas	Australian Power & Gas						
Click Energy	Click Energy						
Country Energy	Origin Energy		●				
Diamond Energy	Diamond Energy						
Dodo Power & Gas	Dodo Power & Gas						
Ergon Energy	Queensland Government						
Integral Energy	Origin Energy		●				
Lumo Energy	Infratil						
Momentum Energy	Hydro Tasmania (Tasmanian Government)						
Neighbourhood Energy	Alinta Energy						
Origin Energy	Origin Energy	●		●			
Powerdirect	AGL Energy	●					
Qenergy	Qenergy						
Red Energy	Snowy Hydro[1]						
Sanctuary Energy	Living Choice Australia/ Sanctuary Life						
Simply Energy	International Power						
Tas Gas Retail (formerly Option One)	Brookfield Infrastructure						
TRUenergy	CLP Group			●			

Electricity retailer
Gas retailer
Host retailer ●

Source: Retail Energy Markets, Australian Energy Regulator 2011

6.5.1 Energy Contracts

One of the biggest changes to customers is locking her/himself into a contract, when changing a retailer or enquiring discount from the former state-owned electricity company, which is now privatised. The contract is an agreement between the customer and retailer. Market retail contracts are offered by electricity and gas retailers often include discounts and benefits for customers. Market contracts have a minimum set of terms and conditions and offer the same basic consumer protection as the standard retail contract. All energy retailers must offer at least one market contract with no exit fees. (Easy, 2013) The conditions of the contract are regulated by NEM and AEMO. These contracts can be either short-term or long-term, where different agreements are set, like price, length etc. This secures the customer of the potential volatility of the price. (Australia, 2013) There are also contracts called hedge contracts, which are agreements between the generators and consumers. The way they work, is that two parties agree to exchange cash so that defined quantity of electricity over a nominated period is effectively valued at an agreed strike price. (Operator, 2010) By the agreement, the generators pay customers the difference when the spot price is above the strike price. The customers pay the generators on the other way round.

EnergyAustralia is offering from different plans a 12% discount on both gas and electricity, when entering into a two year contract with the company. While the researcher was working in the industry approximately ¼ of the customers were unpleased with such an arrangement. Many of them refused to step into a contract even when a discount was offered, while others showed their frustration, but agreed to sign it anyway and tried to cope with the new system. However, there are different energy plans to choose from, which have different requirements and are all set by law. If the customer was with EnergyAustralia prior to the liberalization, they will be automatically transferred to the same company and they are not in a contract, until they require a benefit. What makes the contract terms difficult is that, when a customer wants to change the retailer, there are often termination fees ($200). After the contract ends, the customer has a chance to change the retailer without a fee. Furthermore there are other several points to be kept in mind, for example there is a “cooling-off” period of 10 days, which means the customer can change her/his mind 10 working after signing the contract. (Easy, 2013)

7 Recommendations for Future Research

After carefully reviewing the existing literature of liberalization in electricity markets and comparing that to the case study, it can be said that the future of the former monopoly companies is not entirely in the hands of their own, but also they depend on the NEM and the law itself. Surely, the topic can be examined further and more deeply, especially in the part where primary data can be analysed. The author recommends to find out more by interviewing the company`s administration and surveying the customers. This would give another point of view to the literature analyse. By putting these two researches together should give a more detailed answer to the problem.

8 Conclusion

The objective of the electricity market reform is to ensure the placement of resourced through competition and privatization. The liberalization of electricity market is creating competition in generation and retail. The regulation is necessary in the monopoly of electricity market (distribution and transmission) as well as in ensuring vibrant regulation in generation and retail. The regulation has to ensure the security of supply as a public utility. As a result of the liberalization in Australia, the prices have increased 4% in homes, but decreased a good 23 % for the end-user. In the new market, investments in new technologies have become more risky, therefore the investments in private sector have reduced and this is primarily because the future of the liberalization market is unknown. Also there have developed dominating market leaders (AGL, Origin Energy and EnergyAustralia), who may create a situation where they set monopolistic prices.

Many scholars (Joskow, Politt) highlight vertical integration as a factor of the succession of the liberalized markets. This creates the expectation for competition, which should result in the fall of prices. At the same time, vertical integration is the main advantage in the economic benefits, that is reduces the danger of partner`s opportunistic behaviour created from the imperfection of a contract. From the transaction cost theory, it can be said, that vertical integration has it efficiency arguments and positive effects on the end-user. However, vertical integration is a barrier for the new entrants and does not allow the formation of competition. Analysing the Australian market, it can be concluded that vertical integration creates equal opportunities for all of the participants and creates better conditions

for the functioning market. Vertical integration creates conditions for sufficient number of competitors, but does not ensure it automatically. As liberalization is a opportunity to become a market leader for each company, inevitably some companies have to share the positions below the leader.

EnergyAustralia should keep in mind the following points, that have been compared to the other electricity markets that have liberalized:

- Vertical integration creates a condition of competition on the market, but unbundling alone does not create competition. Ensuring a sufficient number of retailers on the market, there has to be used horizontal unbundling, there cannot be counted only to the new entrants.
- The market concentration is the main problems in the market. The market force should be dealt ex ante, to avoid takeovers and integrations, which can result in market concentration.
- In a liberalized market there has to be seen methods to ensure the security of supply. One option is the requirement of consistent supply for the electricity generator.

Surely, it would be difficult to apply these changes for EnergyAustralia alone, but when there is sufficient amount of market players, it could bring more efficiency.

The analysis concludes the following aspects in the liberalization of firms:

- The rise in the price;
- From the high price of electricity, companies are considering possibilities to build their own power plants for their own usage.
- The customer would choose their county-of-origin only if they offer remarkably lower price.

To summarize, most of the leading retailers have rather similar offers, but EnergyAustralia is a behind, by a procent, after AGL and Origin Energy. It is believed that the reason is that EnergyAustralia has lost its loyal customers by being sold to TRUenergy, which is no longer Australian owned. However, EnergyAustralia started to lost its customers with the beginning of liberalization, when new entrants came to the market with new marketing strategies and offered attracting benefits to customers. Elderly customers still remain with EnergyAustralia`s standard customer, due to the unawareness of the change and limited access to new retailer company`s offers. The firm know how to take advantage from it by applying direct marketing - door-to-door/telemarketing. It is easier for them to sign the contract with

discounts on their doorstep and remaining with their same old company. Marketing companies can see this as a place to trick customers, because the brand name has remained the same, but the company has changed in a structure as well as organizational way. Younger customers are more aware of the deregulation and the acquisition of EnergyAustralia, therefore often switch to a retailer that it is Australian owned. As the research showed the price ranged is rather similar between retailers, with small variations, customers prefer country-of-origin product.

Moreover, the principal of the liberalization is to build competition to regulate the electricity price on the market, it can be concluded that it is beneficial for the customers. When discussing the issues of the electricity market with the marketing company ASAP, they described that the main customer resentment comes from the unfamiliarity of the new regulations. In a monopoly state people did not have to deal with electricity issue, they had one company, who sent the bill. Now, the new regulations have brought contract signing with one company for at least 2 years. People are frequently contacted from different marketing companies and offered a range of benefits. By that the customers are getting more and more superstitious

In the research there was used only secondary data, however also knowledge from the researcher`s workplace played role in making the conclusions.

From the research, it came out that one of the most important aspects is to have many retailers on the market, which creates options for the customers to choose from. The companies should inform their customers more of their products and not try to create unreliability in them. As the marketing company explained that often customers do not know that they need to sign a contract or they have such a variety to choose from. EnergyAustralia, has a option to send newsletter or advertise themselves on newspapers, rather to sometimes impose by direct marketing. Furthermore, the firm should consider lower the prices especially for families or persons with special needs. The regulated pricing has been used in many countries, which can be an option for EnergyAustralia.

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