

## **A BRIEF HISTORY OF THE ELECTRICAL UTILITIES IN NSW**

This material is based on a historic document originally prepared in 1996, and subsequently updated to 2007.

This work excludes the 18 electrical retailers operating in NSW as at Jan 2007.

### **TIMELINES**

Municipal Council of Sydney	20 July 1842 ~ 9 April 1935
Sydney County Council	11 April 1935 ~ 18 December 1990
Electricity Commission of New South Wales	17 Jan 1946 ~ 8 Jun 1979
Sydney Electricity	2 January 1991 ~ 1 March 1996
Shortland County Council	1 September 1957 ~ 30 June 1993
Shortland Electricity/ Orion Energy	1 July 1993 ~ 2 March 1996
EnergyAustralia	2 March 1996 to present

## **A BRIEF HISTORY OF THE SYDNEY COUNTY COUNCIL ENGINEERING MANUAL VOLUME 1**

In seeking the origin of the Sydney County Council it may be as well to outline briefly the origin of the electricity supply industry itself. Today this industry is so highly developed technically so enormous in size and so far reaching in effect that it is difficult to realise fully just how young it is in years.

The first occasion on which electricity was generated for sale to the public in America was in September 1879 when the California Electric Light Co. commenced operations in San Francisco. The Company's first plant consisted of two generators, one supplying six lamps, the other sixteen lamps.

The first occasion on which electricity was used for street lighting was in 1878 when sixteen arc lamps were installed in the Avenue de Opera, Paris, France.

Soon a number of lighting systems employing arc-lamps were built and used in England, Europe and America for outdoor purposes and for stage illumination in theatres. But these lamps, because of their brilliance the fumes they produced and the heat they generated, were unsuitable for ordinary indoor purposes.

Following the pioneering work of others, J. W. Swan in England, and T.A. Edison in America, evolved almost simultaneously a satisfactory incandescent carbon filament lamp. Swan exhibited his lamp in December 1878. Edison patented his lamp in 1879 and in 1880 produced the first commercial incandescent lamps.

The first public supply system of electricity in Britain was introduced by Messrs. Siemens Bros. when they installed a system of lighting in the streets of Godalming, Surrey, England, in 1881. The generator used was driven by waterpower.

The world's first commercial power station for incandescent electric lighting commenced operation on the 12th January 1882, at Edison Electric Light Company, 57 Holburn Viaduct London.

In 1832 Governor Richard Bourke drew attention to the need for a local Government body in Sydney that would establish and maintain a street lighting service. In a Minute to the Legislative Council he wrote:

"The time has arrived at which inhabitants of Sydney may be expected to administer their own convenience and comfort by providing, by means of a body elected among themselves for the repairing, cleansing and lighting the streets..."



On 20th July 1842 the Legislative Council passed a Bill "to declare the town of Sydney to be a city and to incorporate the inhabitants thereof". In November of the same year the Sydney Municipal Council, the body that was to concern itself with "lighting the streets" - and eventually to set up its own undertaking to generate electricity and supply the city and many suburbs with light heat and power - held its first meeting.

The first occasion on which a public demonstration of an electric light was given in Sydney was on 11th June 1863 when the city was illuminated in honour of the marriage of the Prince of Wales.

Electricity for lighting was first used in Sydney in 1878. The Government of the day had decided to hold an International exhibition and to build an International Exhibition Garden Palace in the Botanic Gardens. Time in which to complete the Palace was short and several generators were imported from England so that work could be carried out at night by means of arc light.

In about 1882 approximately 80 electric light plants were imported. Owing to faulty engines, these plants were not very effective at first. However improvements were made and they disposed of to private individuals and Government departments.

Knowledge of the new light spread quickly. The Government used it to light the General Post Office, the wharves at Circular Quay and the lighthouse at South Head. A little later, as the commercial possibilities of the new "illuminant" were realised, a number of small companies were formed and carried on the business of generating and supplying electricity to groups of premises nearby.

To Tamworth New South Wales, goes the destination of being the first town in the Southern Hemisphere to light its streets by means of electricity. This historic event took place on the 9th November, 1888. Tamworth was soon followed by the towns of Young, Penrith, Moss Vale, Broken Hill and Redfern. By 1891 each of these places had its own electricity supply system.

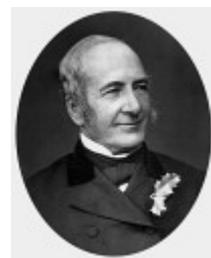
As early as 1882 the Municipal Council of Sydney consulted overseas experts, including Edison, on the practicability and cost of lighting the streets of the city with electric light. However, it was not until 1891 that the Council sought the right to supply the City of Sydney with electricity. Although the Municipal Council of Sydney Electric Lighting Bill was first introduced in the Legislative Assembly in 1891, it was not passed until 1896. In the five years between its introduction and enactment the bill was discharged on a number of occasions because of the prorogation of Parliament, and on one occasion when a point of order was taken and upheld against it. Before the bill was next tabled in the House, the preamble was amended to prevent a similar point of order being taken in the future.

On the 27th October, 1896 the following message from His Excellency the Governor, dated the previous day, was read to the Legislative Assembly by the Speaker

"A Bill intituled 'An Act to enable the Municipal Council of Sydney to light the streets, also public and private places of the City of Sydney with the Electric Light, and also places outside the said City, and to exercise all powers necessary for such purposes to raised by debentures the sum of two hundred and fifty thousand pounds' - as finally passed by the Legislative Council and Assembly, having been presented to the Governor for the Royal Assent, His Excellency has, in the name of Her Majesty, assented to the said Bill, and has this day transmitted it to the Legislative Council, to be numbered and forwarded to the proper officer for enrolment in the manner required by Law".

The Municipal Council of Sydney Electric Lighting Bill at lengths achieved the dignity of an Act - an act that was the foundation stone on which was built, the Electricity Undertaking of the Municipal Council of Sydney - later to be transferred to the Sydney County Council.

The first step to be taken to establish the Council's Electricity undertaking was to appoint a competent engineer who would visit Sydney and prepare the necessary plans and specifications for the installation. The Council consulted the Agent General of New South Wales in London on this matter and subsequently appointed as its Consulting Engineers in England, Sir William Preece K.C.B. (pictured), formerly Engineer-in-Chief and Electrician to the Post Office Department at St. Martin's le Grand (and twice President of the Institution of Electrical Engineers) and Major Cardew a well known Board of Trade expert.



Major Cardew arrived in Sydney early in March 1900 and on the 22nd of that month submitted a scheme which would enable the Council to supply electricity to districts up to a distance of five miles from the Power Station which was to be in Kent Street near the Observatory. Later, however because of resumption of the Kent Street site by the Government, the site of the present Pyrmont Power Station was chosen.

In 1902 instructions were cabled to Messrs. Preece and Cardew to invite tenders for the generating machinery and plant required. Of the tenders received that of Messrs. Dicky Kerr and Co. Ltd. was the lowest and it was accepted.

The years 1902 and 1903 constituted a period of tremendous activity for the Municipal Council of Sydney in relation to its Electricity Undertaking and in the early months of 1904 it was apparent that the inauguration of the Council's Undertaking was not far off.

By early July the installation of the system was nearing completion; a system that was to light the streets of Sydney by means of electric arc-lamps and give to the general public a source of light, heat and power hitherto unavailable except in a few city blocks which were supplied by the small private companies previously mentioned.

At last The Municipal Council of Sydney's Electricity Undertaking, conceived in the early eighties when the advice of Edison, Swan and other experts was sought, and legislated for in 1896, was a reality.

The 8th July 1904 was the date chosen for the official switching on of the Undertaking's supply system. At 5.00 p.m. the then Lord Mayor of Sydney turned on the steam to set the engine and generators in motion, and the Lady Mayoress turned on the electric current with a gold presentation switch key.

The new electric arc lamps were each of 2,000 candlepower whilst the existing gas lamps were 40 candlepower with 400 candlepower lamps on the principal street corners. Of these latter lamps the "Sydney Morning Herald" in reporting the switching on of the electric lights commented, "...the 400 candle-power gas lamps have been completely overshadowed by the brilliance of the new electric arcs".

From the day of its commencement the Undertaking grew with a rapidity that far exceeded the expectations of even its most ardent advocates. Showing keen business acumen, the Council fixed charges for supply that were calculated to ensure profitable results, and at the same time attract business.

Initially the demand on the Council's system was mainly for street lighting, but by the end of 1905 there were 519 customers and the number of kilowatt hours sold was 2,080,284.

In 1907 one of the private companies was purchased by the Council and within twelve months three others were acquired. In 1913 the only remaining private supply company was purchased and the Redfern Undertaking was taken over as a going concern in the same year.

The first extension of mains beyond the city limits was into the borough of Paddington in 1905. Shortly after the mains were also extended into the Municipality of Camperdown. It was to be some time, however, before extensions into other suburban Council areas took place. As far as the Council's Undertaking was concerned the period from 1908 to the outbreak of the First World War was one of review, consolidation and advance. In 1910 four municipalities entered into agreements for the extension of mains into their areas for the purpose of supplying the public from 1911 onwards the dominant feature of the Undertaking's commercial activities was the extension into the neighbouring municipalities. At the outbreak of the war supply was being given to twenty three municipalities outside the city and the councils of thirteen of these areas had signed Agreements for the City Council to supply electricity for the lighting of their streets.

Naturally the war had a severe braking effect on the progress of the Undertaking. The difficulties of the war years and the immediate post-war period in relation to generating plant alone are revealed by the fact that no new boiler plant was obtainable from February 1916 until July, 1921, and no additional generating plant was available between November, 1915 and January 1921.

Shortages were not confined to power station requirements. Most of the Undertaking's plant and equipment was imported and, as the war continued, manufacturing difficulties overseas, coupled with the shortage of shipping space caused the situation to worsen in practically every field of the Undertaking's activities.

The full impact of wartime scarcities was felt from 1916 onwards. In March, the public was warned that it might become necessary for the Undertaking to suspend the extension of mains. Intending customers were advised to take no steps towards having electrical installations carried out until they had received the Council's assurance that supply could be given. The situation had so deteriorated by early 1917 that all main extensions except those, to which the Council was already committed, were stopped. It later became necessary to restrict supply even to those premises which were on existing mains routes. Certain restrictions were slightly eased when in 1917; the Department of Railways supplied power to the Council under an Agreement for the interchange of supply between the Council's Power Station and the Railway's White Bay Power Station.

The demand for electricity in the immediate post-war period was phenomenal and in the early twenties it became obvious that in the near future it would be necessary to establish another power station. New generating plant had been installed at Pyrmont Power Station and additional plant was on order. It was anticipated that by 1924 the Pyrmont Power Station would have been extended to its economic limit with a total installed rating of 75,000 kilowatts.

In 1925 the Council decided to acquire a site for a new power station and have it in operation as soon as possible and shortly after chose a 117 acres area at Bunnerong in the Municipality of Randwick.

Bunnerong Power Station went into commercial operation on 2nd January 1929 when the first two turbo-alternators were put into service. The fourth turbo-alternator at Bunnerong was put into service just 25 years after Pyrmont first commenced operations. In that quarter of a century Sydney had risen from the position of being electrically one of the most backward cities in the Commonwealth of Australia to that of the most advanced.

In 1904 the Municipal Council of Sydney was using electricity to light a small portion of the city; in 1929 all of the streets of the city and those of 34 suburbs were being lit by the Electricity Undertaking. Besides lighting the streets, the Undertaking was selling electricity direct to 181,000 customers in an area of 155 square miles. It was also supplying electricity in bulk to nine Local Government bodies, which carried out their own reticulation. The aggregate area controlled by these bodies was 616 square miles and the total number of customers they served was 199,536.

The first occasion on which the City Council sold electricity in bulk for retailing purposes was in 1917 when supply was given to the Parramatta Electric Supply Co. However this supply was terminated in 1921 when the company commenced to purchase its electricity from the Railway Commissioner.

In 1921 the Fairfield Municipal Council and the Municipality of Manly began to purchase supply in bulk. By 1935, 16 Local Government areas, totalling 747 square miles, were being supplied in bulk, and the number of customers was 30,526.

On the 6th March 1935 a bill was introduced in the N.S.W. Legislative Assembly which, among other things was designed to remove the ownership and control of the Electricity Undertaking from the Municipal Council of Sydney.

The Minister for Local Government, who introduced the Bill said with regard to electricity that the proposed legislation "... deals with the supply and use of electricity.... It constitutes a Sydney County Council that will control and manage the generation and distribution of electricity within the area to which the Sydney Municipal Council now supplies electricity direct to the consumer".

During his explanation of the Bill, the Minister informed Parliament 'it was the Government's objective to correct a number of anomalies which the Government considered, existed in relation to electricity supply in the area supplied by the City council.'

He pointed out that the supply area, outside the city itself depended on agreements with 32 municipal councils for supply direct to customers. If those agreements were not renewed as

they expired, he said the City Council would be left with excess plant of little realisable value. He reminded the House that difficulties had been already experienced between the City Council and some suburban council in the eastern and southern suburbs that wished to form their own county council. Referring to what he considered to be an inherent weakness in the existing situation the Minister said:

"The Electricity Undertaking is at the present time on a very dangerous foundation and those who understand the position fears the disintegration of the Undertaking within a few years and the huge waste of capital which. Is bound to result."

The Bill to establish the Sydney County Council was passed by the Legislative Council on 9th April 1935 and was assented to by his Excellency the Governor on April 11th. The name of this Act was The Gas and Electricity Act 1935. (NSW Government Gazette , 20 December 1935, Vol.4, p.4874 and 12 July 1935, Vol. 3, p.2799)

The first election of the newly constituted County Council took place on 17th August 1935. The Sydney County District comprised the areas in which the Undertaking supplied electricity direct to customers. The areas were divided into three constituencies the Third constituency returning one Councillor and the First and Second constituencies each returning two Councillors (by 1949 some suburban municipalities were amalgamated and The Sydney County District was reconstituted to comprise four constituencies and the number of members of the County Council was increased from 5 to 9. The first council of nine was elected on 9th February 1949). The electors were aldermen of the constituent councils.

The provision of a headquarters for the Undertaking presented no difficulty. Even before the Sydney County Council was mooted the Undertaking had outgrown the accommodation in its existing office building (next to the Sydney Town Hall). The City Council had decided to remodel portion of the Queen Victoria Building which it owned and house the Undertaking there. The alterations to the building were almost completed when the Sydney County Council was constituted and that body decided to lease as its head office the remodelled portion of the building. The County Council took over its new premises on the 1st January, 1936 which, was the appointed day on which it became the body generating and reticulating electricity in the area formerly supplied by the Municipal Council of Sydney.

In 1936 it was decided to adopt a badge which would be printed or embossed on the Council's stationery and incorporated in the Common Seal of the Council. A competition was conducted both among staff and the general public. The design chosen included a traditional symbol of the sun to depict heat, the classical torch to depict light and the figure of the horse to depict power. The Latin motto "Peractis Postera Praestent" means, "Let the future excel the past."...

The Sydney County Council reaffirmed in February, 1939 a decision made by the Municipal Council of Sydney to convert the direct current supply in the city area to alternating current supply.

Preliminary steps had been taken in 1930 to make the change to alternating current but the trade depression in the early thirties brought the scheme almost to a standstill. In 1935 however, the scheme again got wider way and the work continued rapidly until Japan entered the Second World War in December 1941. The scheme was resumed in 1946 and of course has now been completed. There is, however, some direct current still used to supply lifts and plant of a specialised type.

In December 1949 the Premier of N.S.W. announced that State Cabinet had approved the formation of Electricity Commission to control the generation of electric power throughout New South Wales. He said that the Commission would be empowered by Legislation to become ultimately the Overall State generating authority.

The Act setting up the Electricity Commission of N.S.W. was passed in May, 1950 and the first meeting of the Commission was held on the 22nd May, 1950. The 1st January 1952 was the day on which the Commission took over from the County Council the function of generating electricity. In addition to power stations stores plant, and

substation equipment power station inter connectors and sundry motor vehicles and office equipment were transferred. Of the total number of 6,137 employees in the Council's employ on the appointed day 2,203 were transferred to the Commission.

From 1st January 1952 the Council's activities in the Mains have been confined to retailing electricity purchased from the Commission in the County District.

On the first of July 1955 the Sydney County District was extended to include the Sutherland Shire (an area of 143 square miles) and the Sutherland Electricity Undertaking was transferred to The Sydney County Council. The number of customers transferred was 21,760. Just six months later the Municipality of Bankstown was included in the Sydney County District. The municipality is 30 square miles in area and the number of customers transferred were 30,141.

Two further increases in the County District took place in 1958. The reticulation in the Shire of Hornsby became the responsibility of the Council on 1st January 1958. The area is approximately 198 square miles and the number of customers transferred was 14,775. The distribution system of the former Electric Light and Power Supply Corporation within the city of Sydney and the Municipalities of Ashfield Leichhardt and Marrickville were transferred to the Council on 1st July 1958. The area concerned covered 9 square miles and the number of customers transferred was 41,244.

For many years the operations of the Mains Branch had been decentralised but this did not apply to other branches. But, with the rapid growth of the County District, it became necessary for this decentralisation to be widened to include a number of branches. Apart from the City, there are three districts (within the County District) - Northern, Eastern and Western. Area establishments have been set up in the Northern and Western districts whilst the Eastern Area Establishment is in the planning stage. In Sutherland the engineering functions are on an area basis under the control of an Area Superintending Engineer. The Administrative and Commercial functions are under the control of the respective branch heads concerned.

In 1960 an architectural competition for the design of a new Head Office was conducted and a winning design chosen. The new Head Office is being erected on the corner of George and Bathurst Streets, Sydney.

A glance at a few figures show how great has been the growth of the Undertaking from its birth in 1904. At the close of 1904 there were 86 customers connected to the system, at the end of 1965 there were 538,907. The supply area in 1904 was confined to a few streets of inner Sydney, at the end of 1965 "it covered 536 square miles. The number of kilowatt hours sold in 1905 was 2,080,284 and in 1965 the kilowatt hours sold numbered 4,392 million.

The Sydney County Council is the Largest County Council in New South Wales in 1966.

### **Electricity Commission of New South Wales**

The Electricity Commission of New South Wales was established by the Electricity Commission Act, 1950 (Act No 22, 1950). (1) The Commission consisted of five commissioners appointed by the Governor. (2) Each Commissioner was appointed for a term not exceeding seven years, but was eligible for re-appointment (3) Two of these commissioners were identified in their instruments of appointment as Chairman and vice Chairman respectively. (4) The Commission was a body corporate with a perpetual succession, therefore having capacity to sue or be sued in its corporate name, and the right to acquire and dispose of real and personal property (5) The Commission set its own rules for convening meetings and for meeting procedures. Three commissioners constituted a quorum, and the resolution of the majority of the members at any meeting became a decision of the Electricity Commission of New South Wales. The Commission was required to keep full and accurate records of its formal meetings, a copy of which was to be forwarded to the Minister within a week of each meeting. (6)

The Commission was subject to the direction and control of the Minister. (7)

The Commission could give directions to the electricity authorities - the Sydney County Council, Commissioner for Railways, and Southern Electricity Supply of New South Wales particularly in regard to (but not restricted to) Supplying electricity to the public; Improving the supply of electricity to the public; or Delaying the construction of electricity supply works

The Commission could also direct these authorities as follows:

To make available staff skilled in the design, construction or operation of power stations to another electricity authority;

To interchange electricity between its power stations and those operated by another electricity authority> and it could also give direction in relation to the use of plant and equipment necessary for such arrangements. Terms were to be mutually agreed between the authorities for this interchange, but if these were not in place the Minister could make directions. (8)

In regard to the construction of works for the supply of electricity the role of the Electricity Commission included:

Maintaining, operating and if necessary improving and extending works for the generation and supply of electricity vested in it;

Constructing, new, additional or supplementary works and acquiring works or property to be used for the generation or supply of electricity;

Supplying electricity to people within or outside NSW at a price agreed by the parties;

Conducting any business arising out of, or ancillary to electricity generation and supply; and

. Purchase electricity from any person. (9)

On an appointed day the electricity undertaking of the Commissioner for Railways was to be transferred to the Electricity Commission. Following this the Commission was required to ensure sufficient power was available for the operation of trains, trams and trolley- buses. A cost was negotiated between the Commission and the Commissioner for Railways for the supply of the electricity. (10)

The role of the Commission included:

Promoting and encouraging the development and use of natural resources in conjunction with the generation of electricity;

Promoting the use of electricity; and

Providing advice to those involved in the generation, transmission, supply, distribution and use of electricity.

After its constitution the Commission negotiated with the Electric Light and Power Supply Corporation Limited and the Parramatta and Granville Electric Supply Company limited. (11) The part of the Sydney County Council that was responsible for the generation and supply of electricity was transferred to the Commission following negotiation for the division of the debts, assets and liabilities (12) To affect this both a Technical Joint Committee and a Finance Joint Committee was established. (13) The Commission could acquire the whole or

any part of a power station or transmission line operated by any other electricity undertaking following agreement between the parties and the approval of the governor. (14)

The Act provided for the transfer of staff from the Sydney County Council, the electricity undertaking of the Commissioner of Railways, and Southern Electricity Supply of New South Wales and for the appointment of additional staff to carry out the role of the Electricity Commission of New South Wales. (15)

The Commission had power to borrow money for the construction or acquisition of works; the acquisition of electricity undertakings; and the discharge of liabilities, indebtedness or the renewal of loans (16)

The Electricity Commission Act, 1950 (apart from Part VII – Emergency Provisions) was proclaimed to commence on 22 May 1950. (17) The appointment of the first commissioners was proclaimed on 19 May 1950 (18)

On 1 November 1950 the Commission took responsibility for the business and assets of the former Southern Electricity Supply of New South Wales as stipulated by section 31 of the Electricity Commission Act, 1950 (19)

The generating and transmissions function of the Sydney County Council were transferred to the Commission on 1 January 1952 (20)

Similarly the generating and transmission functions of the Commissioner for Railways' electricity enterprise were transferred to the Commission on 1 January 1953. (21) The four steam power stations owned and operated by the Commissioner for Railways at White Bay, Ultimo, Newcastle and Lithgow together with substations, transmission lines and underground cables which had been used to supply bulk electricity to several municipalities and shires were transferred from the Railways, however, by arrangement with the Electricity Commission the railways continued to operate and maintain some of the substations and transmission lines and carried out some of the construction and design work. (22)

The transfer of the Electric Light and Power Supply Corporation Ltd and its subsidiary Parramatta and Granville Electric Supply Company Limited was delayed owing to litigation over the valuation of the assets. However, the Electricity Commission (Balmain Electric Light Company Purchase) Act, 1956 (Act No. 30, 1956) made possible its acquisition on 1 January 1957. (23)

By 1970 the Commission operated the following power stations:

Steam: Balmain; Bunnerong ('A' and 'B'); Liverpool; Maitland; Munmorah; Muswellbrook; Penrith; Port Kembla (Low Power, High Power (E); High Power (Pkge); Pyrmont; Tallawarra ('A' and 'B') Tamworth (Low and High Power) Ulan; Vales Point; Wallerawang ('A' and 'B') Wangi ('A' and 'B') White Bay (High Power and Low Power); Zarra Street (Low Power and High Power)

Hydro-Electric: Brown Mountain; Burrinjuck; Hume; Keepit and Warragamba;

Internal combustion; Broken Hill

(24)

The Electricity Commission (Amendment) Act, 1981 (Act No. 128, 1981) increased the Commission's role in relation to coal mining which in the principal act had been restricted to promoting and encouraging the development of natural resources. The Commission was authorised to undertake coal mining and to use the coal for the generation of electricity or sell it for profit.

The purposes for the Commission's involvement with coal mining were:

- (a) To reduce the cost of electricity generation and supply;
- (b) To facilitate the generation of electricity and
- (c) To promote and encourage research into and development of the coal resources of the State

The coal mining functions of the Commission could be carried out by the Commission, by an affiliate or both in partnership. The Commission was also authorised to joint in the formation of coal mining companies or deal in shares of coal mining companies. (25)

The Electricity Commission of New South Wales was reconstituted by the Electricity Commission (Amendment) Act 1982 (Act No 63, 1982) The Act established a Commission of between five and seven members appointed by the Governor. Matters relating to the appointment and tenure of the commissioners and the procedures of the Board were set down in schedules of the Act. (26) The Commissioners could by issuing an instrument delegate functions to:

- (a) the General Manager;
- (b) a committee of commissioners including the General manager, or a commissioner nominated by the General Manager;
- (c) an employee of the Commission;
- (d) a person holding a particular office on the staff of the Commission; or
- (e) any person the Commission uses (such as consultant) (27)

While the instrument was current the person to whom the function was delegated continued to be responsible for the exercise of the function.

The office of General Manager who was the chief executive of the commission was created by the Act. The General Manager was responsible to the commissioners for managing the affairs of the agency. (28)

The Electricity Commission (Amendment) Act 1987 (Act No 105, 1987) altered the composition of the Commission to consist of between eight and ten commissioners (29)

Following the creation of the Energy Corporation of New South Wales the clause of the principal Act which prohibited sale of electricity within a county council area was altered so that the Minister could approve this subject to any terms or conditions on the recommendation of the Energy Corporation (30)

A new responsibility introduced by the 1987 Act was the requirement for the Commission to prepare Electricity Development and Fuel Sourcing Plans. Each plan was to cover a period of at least 30 years and to cover the following:

- the cost-effective generation and supply of electricity;
- the development and use of fuel sources for electricity generation;
- proposals for expansion in the generation and supply of electricity; proposals for expansion of generation and supply of electricity and action to meet or reduce demand for electricity in the period;
- interstate trading or development activities planned; (31)

The draft plans were to be submitted to the Energy Corporation that was to review the plan and make written recommendations to the Commission. The Commission was to consider the recommendations of the Corporation prior to submission to the Minister. (32) The plans were to be tabled before both houses of Parliament. (33) The annual report of the Electricity Commission was to identify actions taken in accordance with the plan, identify any changes that would impact upon performance of the objectives of the plan, and other actions taken which were not in accordance with the plan. (34)

The Electricity Commission (Amendment) Act 1989 (Act No 3, 1989) once again altered the size and composition of the Commission. The amending act allowed for a Commission of between six and eight members. The Commissioners were appointed because of the managerial, commercial or other appropriate qualifications. One of the Commissioners was identified as General Manager in his instrument of appointment. Of the other members a minimum of four and a maximum of six were part time commissioners. (35)

On 1 January 1992 the Electricity Commission of New South Wales began trading as Pacific Power. The new corporate identity signalled the intention of the agency to become both nationally and internationally competitive. The operations of the agency were divided into six

business units. These included three generating groups - Pacific Power Western; Pacific Power Hunter and Pacific Power Central Coast. These competed to sell power to Pacific Power Pool Trading, the marketing unit which onsold electricity generated by the various groups to county councils, major industries and interstate utilities. Pacific Power Grid managed the transmission network and Pacific Power Services provided support services to the agency. (36) Pacific Power Central Coast operated Eraring Power Station for Eraring Holdings Pty Ltd that had been established in 1981. (37)

Pacific Power had two wholly owned subsidiaries:  
Pacific Power International used its expertise in coal-generated electricity to secure markets within Australia and abroad; and  
ENC (management) Pty Limited was responsible for the agency's coal mining interests. (38)  
In 1994 this subsidiary was re-named Powercoal Pty Ltd (39)

On 1 July 1994 an additional subsidiary company was established - PacificGrid Pty Ltd managed the transmission lines. The company operated a 13,000-kilometre grid and 86 substations. The role of the company was to maintain the supply of electric to New South Wales customers and to negotiate trading arrangements with power suppliers in other states. (40)

Transgrid succeeded PacificGrid Pty Ltd assuming responsibility for operating the transmission lines from 1 February 1995 enabling Pacific Power to focus on power generation. (41)

The Electricity Legislation Amendment Act, 1995 (Act No 18, 1995) retrospectively altered the title of the Electricity Commission Act, 1950 to the Electricity (Pacific Power) Act, 1950 after which references to the Electricity Commission referred to Pacific Power, those to a commissioner were understood to be a Director of Pacific Power and those to the General Manager the Chief Executive. (42)

The principal objectives of Pacific Power were to be a successful business, to exhibit a sense of social responsibility and to conduct its operations in compliance with the principles of ecologically sustainable development. (43)

The Board of Pacific Power was to comprise:  
The Chief executive;  
Between three and five part-time directors appointed by the Governor. These directors were selected for their qualifications in management, commerce, finance, legal or similar expertise;  
One director selected by a Committee from a list of people nominated by the Minister and the Labour Council. Two of the part-time directors were appointed by the Minister as Chairman and Deputy Chairman respectively. (44) The role of the Board was to determine the policies and strategic plans of Pacific Power having regard for the need for reform in the electricity industry. (45)

The Chief Executive was appointed by the Governor on the recommendation of the Minister. The Minister was to give the Board the opportunity to recommend one or more candidates prior to making an appointment. (46) The role of the Chief Executive was to manage the affairs of Pacific Power in accordance with policies and plans determined by the Board and subject to any directions by the Minister. (47)

The functions of Pacific Power could be delegated to a staff member or consultant, subsidiary company or other class of person prescribed by regulations. (48)

During the period 1992 – 1996 Pacific Power diversified its stations to use environmentally responsible and renewable sources of energy including solar, hydro and gas turbine generation, wind power and the use of coal bed methane as a fuel. (49)

In order to introduce competition to the electricity supply industry, Pacific Power disaggregated on 1 March 1996. Two new generating entities were created - Delta Electricity and Macquarie Generation. The Bayswater and Liddell power stations transferred to

Macquarie Generation; Vales Point, Munmorah, Wallerawang and Mt. Piper transferred to Delta Electricity; and Eraring and various hydroelectric facilities remained with Pacific Power. (50)

The electricity market was regulated in 1996. The components of the market were:  
TransGrid that operated the distribution lines;  
Three generators - Delta Electricity, Macquarie Generation and Pacific Power; and  
Six electricity distributors

The generators sold electricity to the distributors and to large customers who on-sold to business and retail customers. Initially the NSW Government controlled the market, but commencing on 10 May 1996 the price of electricity was determined by the market forces of supply and demand. (51)

The reduced emphasis on generation of electricity enabled Pacific Power to contract competitively for many projects in the industry throughout Australia, the Pacific, and Asian nations and in 1998 it secured the following:  
The maintenance contract for Collie Power Station in Western Australia;  
The lead management in a consortium for the design and construction of a new power station in Callide Queensland;  
Construction of Australia's first connected wind farm in Crookwell NSW; and  
Construction of Australia's first solar suburb in Homebush NSW  
In addition to a considerable overseas business. (52)

The National Energy Market (NEM) commenced operations on 13 December 1998. This replaced the various state electricity markets. Pacific Power's Operations and Marketing Unit conducted sales via the market. (53)

Power Coal Pty Ltd was purchased in its entirety by Centennial Coal Company Limited on 6 August 2002. (54)

Pacific Power was dissolved by the Pacific Power Dissolution Act, 2003 (Act No 17, 2003) with came into effect on 1 July 2003. (55)

Pacific Power (International) Pty Limited continued to operate while moving into the private sector. Endnotes:

- (1) Electricity Commission Act 1950 s. 5 (1) (a)
- (2) Ibid s. 5 (1) (b)
- (3) Ibid s. 5 (2) (a)
- (4) Ibid s. 5 (1) (c)
- (5) Ibid s. 6 (1)
- (6) Ibid s. 6
- (7) Ibid s. 7
- (8) Ibid s. 8
- (9) Ibid s. 9 (1)
- (10) Ibid s. 12
- (11) Ibid s. 18
- (12) Ibid s. 19 – 22
- (13) Ibid s. 22
- (14) Ibid. s. 34
- (15) Ibid PART VI.
- (16) Ibid s. 39
- (17) NSW Government Gazette 19 May 1950 p. 1354
- (18) Ibid p. 1358
- (19) NSW Government Gazette 27 October 1950 p. 3170
- (20) NSW Government Gazette 21 December 1951 p. 3800
- (21) NSW Government Gazette 19 December 1952 p. 4602
- (22) Report of the Commissioner for Railways 30 June, 1953 p. 46
- (23) Electricity Commission (Balmain Electric Light Company Purchase) Act, 1956 s. 2

- (24) Report of the Electricity Commission of New South Wales for the year ended 30 June 1970 Appendix 4 p. 31- 32 in NSW Parliamentary Papers 1969-70-71 Vol 4 p. 163- 164
- (25) Electricity Commission (Amendment) Act, 1981 Schedule 1. New Sections 13A – 13G
- (26) Electricity Commission (Amendment) Act 1982 s. 5A
- (27) Ibid s. 5B
- (28) Ibid s. 6A
- (29) New Section 5a (1) of the principal Act
- (30) New section 9(2) of the principal Act
- (31) New Section 17A-17B of the principal Act
- (32) 17C- 17D
- (33) 17F
- (34) s. 55 (3)
- (35) Electricity Commission (Amendment) Act 1989 Schedule 1
- (36) Pacific Power Report for the year ended 30 June 1992. Volume 1, p. 24
- (37) Pacific Power Report for the year ended 30 June 1993. Volume 1 p. 39
- (38) Pacific Power Report 1992 Op. Cit p. 70 – 74
- (39) Pacific Power Report for the year ended 30 June 1994. Volume 1, p. 16
- (40) Loc. Cit
- (41) Pacific Power report for the year ended 30 June 1995 Volume 1 p. 8
- (42) Electricity (Pacific Power) Act, 1950 s. 3 (6)
- (43) Ibid s. 5A
- (44) Ibid s. 5B (2)
- (45) Ibid s. 5C
- (46) Ibid. s. 5D
- (47) Ibid s. 5F
- (48) Ibid s. 5G
- (49) Report for Pacific Power for the year ended 30 June 1996. Volume 1 p, 7
- (50) Ibid. p. 3, 8
- (51) Loc. Cit
- (52) Report for Pacific Power for the year ended 30 June 1998. Volume 1 p. 2- 5
- (53) Report for Pacific Power for the year ended 30 June 1999. Volume 1 p. 11
- (54) Report for Pacific Power for the year ended 30 June 2002. Volume 1 p. 11
- (55) Pacific Power Dissolution Act, 2003 s. 4

## **SHORTLAND COUNTY COUNCIL**

Shortland County Council was constituted under the Electricity Development Act, 1945-1957, the Local Government Act, 1919, and the Borough of Newcastle Electric Lighting Act, 1892 to provide electrical services to the City of Newcastle, the Municipality of Dungog, the Shire of Gloucester, Lake Macquarie, Port Stevens and Stroud and parts of the Shires of Lower Hunter and Wallarobba. The County Council was proclaimed in the NSW Government Gazette of 12 July, 1957 and commenced operations on 1 September, 1957

The major responsibilities of the County Council were as follows: (a) the construction, extension, protection, maintenance, control and management of the supply of electricity; the installation of electrical fittings and appliances including the purchase, generation, and manufacture of electrical fittings or appliances; (b) borrowing money for the construction of works or to enable the provision of any services; (c) issuing debentures, mortgage deeds or bonds to secure the repayment of moneys borrowed (d) levying a loan rate (e) granting permission to other parties to supply electrical current to residents and for this purpose to lay or erect pipes, poles, wires and other apparatus over public places; (f) granting permission for a person to construct, lay, suspend or otherwise place rails, pipes, wires, cables, tunnels or other structures in public places for the supply of electric current (g) responsibilities imposed on the Council of the City of Newcastle under the Borough of Newcastle Electric Lighting Act, 1892 (1) The last-named Act required the lighting of public places and the management of all necessary infrastructure, the imposition of rates to cover the cost of electricity supply, the installation of metres to measure the use of electricity and a range of provisions to see that electrical works were protected.

In 1993 Shortland County Council consisted of 15 delegates who were representatives of the 12 Constituent Councils. The Council functioned by the Committee system the main ones of which were - Budget Review Committee, Corporate Review Sub Committee, Property Utilisation and Management Committee. The Management structure of Shortland County Council was a General Manager; Internal Auditor; Directors of Administration and Marketing, Finance Services, Electricity Supply, Design Services ; Manager Performance Improvement, Manager Network Control, and District Managers for Lake Macquarie, Newcastle, Maitland and Muswellbrook.

In 1993 the Hunter Region was the State's main source of black coal and therefore possessed 82% of the New South Wales electricity generating capacity. Shortland purchased its electricity from Pacific Power and used its own distribution systems to transmit the fuel to its customers.

Under the Electricity (Amendment) Act councils for electricity supply were dissolved and replaced by corporatised bodies. Shortland County Council was reconstituted to become Shortland Electricity trading as Orion Energy from 1 July, 1993. The new agency ceased to have a dual portfolio reporting responsibility and ceased to report to the Minister for Local Government.

End Notes (1) NSW Government Gazette 12 July, 1957 p. 2152

## **SHORTLAND ELECTRICITY**

Shortland Electricity was established on 1 July 1993 by the Electricity (Amendment) Act, 1993 (Act No. 24, 1993) Shortland Electricity replaced the former Shortland County Council. The new agency was responsible for the supply and distribution of electricity in the following local government areas - Cities of Newcastle, Maitland, Lake Macquarie, and Cessnock and the Councils of Great Lakes (part) , Gloucester, Scone, Dungog, Port Stevens, Singleton, Muswellbrook and Merriwa (part) (1)

The principal functions of Shortland Electricity were (a) the purchase, transmission and distribution of electricity; (b) the provision and maintenance of works for the distribution of electricity; (c) the protection of the public from dangers arising from the transmission, distribution and use of electricity; (d) the promotion of safe and efficient use of electricity and electrical fittings and appliances; (e) the promotion of energy conservation and of measures to increase the efficiency of energy transmission and use; (f) such other functions as are approved by the Minister on the recommendation of the Corporation. (2)

Electricity distributors could also (a) conduct any business and, for that purpose use any property or the services of any staff of the distributor (b) generate electricity; (c) acquire and develop land as necessary for the exercise of its functions and dispose of land; (d) acquire or build, and maintain and dispose of, any buildings, plant, machinery, equipment or vehicles (e) make and enter into contracts or arrangements for carrying out of works or the performance of services or the supply of goods or materials; and (f) make charges and impose fees for services performed and goods and materials supplied by it; (g) appoint agents and act as agents for other persons (3)

The policies of Shortland Electricity were determined by the Board. The Board consisted of between five and 13 members. These consisted of people from categories described in regulations or those with managerial, commercial, financial, legal or other qualifications from the various Council areas served by the Company. The Minister was entitled to appoint up to two members. The Directors appointed a Chairperson and Deputy Chairperson from their number although Ministerial representatives were ineligible for these offices. (4)

The General Manager was responsible for ensuring that the Board's policies were effected. The General Manager also exercised day-to-day management of the distributor; carried out any functions delegated to him; was responsible for the appointment, direction and dismissal of staff and for implementing an equal employment opportunity plan. (5)

The company maintained a general fund and a trust fund and could invest monies held by it in accordance with the Public Authorities (Financial Arrangements) Act, 1987 (6) The company also possessed a number of other powers in relation to the entry of premises to carry out functions, the acquisition of land and the erection of structures.

By mid-June 1994 the corporate structure of Shortland Electricity was as follows: - General Manager, Internal Auditor, Corporate Secretary, Executive Managers were responsible for Financial Services, Design Services, Network Control, and there was a Manager Performance Improvement. Executive Managers were responsible for the following regions- Muswellbrook, Maitland, Lake Macquarie and Newcastle. (7) By June 1995 Shortland Electricity was known as Orion Energy (constituted as Shortland Electricity) (8)

In 1995 the NSW Government formed a taskforce to review and recommend restructuring of the state's electricity generation and distribution sector. The Board of Orion Energy supported this inquiry and met for the last time on 6 July, 1995 (9)

On 29 August, 1995 the Treasurer and Minister for Energy announced the merger of Orion Energy and Sydney Electricity to become EnergyAustralia. (10) The Energy Services Corporations Act, 1995 (Act No. 95, 1995) reduced the number of energy distributors to five. MetNorth Energy established by the Act was subsequently re-named EnergyAustralia and the new company was operational from 2 March, 1996.

End notes:

- (1) Electricity (Amendment) Act 1993 s. Schedule 7 - Shortland Electricity
- (2) Ibid. Schedule 1 Division 2 - 6C Functions of an electricity distributor
- (3) Ibid. Schedule 1 - 6D Ancillary functions of an electricity distributor
- (4) Ibid. Schedule 1 - 6N Constitution of board of electricity distributor
- (5) Ibid. Schedule 1 - 6O General Manager and staff
- (6) Ibid. Schedule 1 - 6Q- T Division 6 - Finance
- (7) Report of the Shortland Electricity for the year ended 30 June, 1994 p. 40-41
- (8) Report of Orion Energy Operations and Financial Review. Volume 1 for the year ended 30 June, 1995
- (9) Ibid. P. 8
- (10) Ibid. p. 2

## **SYDNEY ELECTRICITY**

Sydney Electricity Act, 1990 (Act No 117,1990), which received assent to on 18 December 1990(1), dissolved the Sydney County Council and established Sydney Electricity, which commenced operations on 2 January 1991(2)

The role of Sydney Electricity included a) the purchase, supply and distribution of electricity; b) the provision and maintenance of works for the supply of electricity; c) the development, manufacture and supply of electrical fittings and appliances d) the protection of the public from dangers arising from the transmission, distribution and use of electricity e) the promotion of the safe and efficient use of electricity and electrical fittings and appliances(3)

The Electricity Supply Act, 1995 (Act No.94,1995) repealed the Sydney Electricity Act, 1990 and dissolved the Sydney Electricity corporation on 1 March 1996. (4)

On 1 March 1996, the former Sydney Electricity was merged with Orion Energy to form Energy Australia.(5)

FOOTNOTES: (1) New South Wales Government Gazette, No. 8, 11 January 1991. (2) Disposal Recommendation (DR 5246) (3) NSW Government Directory 1991 (4)New South Wales Government GazetteNo.26, 1 March 1996, p.831 (5)Annual Report of Energy Australia,1996

## **ENERGYAUSTRALIA**

The Energy Services Corporations Act, 1995 (Act No 94 1995) provided for the creation of MetNorth Energy as an energy distributor. (1) This entity was re-named EnergyAustralia by regulation commencing on 2 March, 1996 (2) In addition to the Energy Services Corporations Act, 1995 EnergyAustralia was also governed by The Energy Supply Act, 1995 (Act No 94, 1995) , relevant sections of the Electricity Supply Act 1945 and the State Owned Corporations Act, 1989. The new corporation replaced the former Sydney Electricity and Orion Energy.

The role of the new corporation was to perform all functions in relation to energy distribution and to supply cost-effective energy services that satisfied customer requirements. The principal objectives of Energy Australia included (i) to operate successfully as a business including to operate as efficiently as any comparable business; to maximise the State's investment in the Corporation; and to exhibit a sense of social responsibility by showing regard to the community in which it operated; (ii) to conduct its operations in compliance with the principles of ecologically sustained development; (iii) to operate having regard for regional development and decentralisation; (iv) to operate efficient, safe and reliable facilities for the generation of electricity; (v) to be an efficient and reliable supplier of electricity; and (vi) to participate successfully in the wholesale market for electricity. (3)

In addition to its principal functions EnergyAustralia was entitled to provide any facilities or services ancillary to its principal functions and to conduct any businesses which would further its objectives. (4) It was required when acquiring energy to consider all sources especially from renewable reserves, and to consider the impact upon the environment of energy acquisition (5) The Corporation was also required to encourage the safe, efficient and environmentally sensitive use of energy including electrical installations, and to promote public awareness of the dangers of coming into contact with or damaging energy-producing equipment.

EnergyAustralia was managed by a Board of Directors comprising the Chief Executive Officer, four Directors appointed by the Minister and one by the NSW Labor Council The remaining Directors were elected by the Shareholders. (6) The Board was accountable to the shareholders. (7) The Chief Executive Officer was appointed by the Board after consultation with the shareholders, (8) The dividend was determined by the shareholders with consultation of the Board (9)

End notes:

(1) Energy Services Corporations Act, 1995 Schedule 1, part 2

(2) NSW Government Gazette 1 March, 1996 p. 833

(3) Energy Services Corporations Act, 1995 s. 8

(4) Ibid. s. 9 (3)

(5) Ibid. s. 9 (4)

(6) Ibid. schedule 2 No. 1

(7) Ibid. s. 1(6)

(8) Ibid. Schedule 2. No. 2

(9) Ibid. Schedule 2 No. 4