CHRONOLOGY OF NEW ZEALAND ELECTRICITY REFORM

Energy Markets Policy

Energy & Resources Branch

August 2015

This document outlines the main developments in New Zealand's electricity reforms since the mid-1980s.

1. Starting point: Mid-1980s

Electricity generation and transmission were amongst the responsibilities of a Government department, the Ministry of Energy. This Ministry was also responsible for policy advice and regulatory functions. There was extensive political involvement in generation investment decisions, project management was not accorded the attention that met current standards, wholesale pricing was (at least in part) determined by political factors, and some supply shortages emerged.

In 1985[1] local distribution and supply were the responsibility of sixty-one electricity supply authorities (ESAs)[2] - (there were ninety-three in 1945). These were electorally oriented, statutory monopolies. Inefficiency, lack of customer choice and cross-subsidies resulted.

This set of circumstances coincided with increasing concern about New Zealand's overall economic performance. In turn, this concern led to introduction of wide-ranging micro-economic reforms, more predictable macro-economic policy formation and strengthened public sector accountability arrangements. Outcomes sought included economic growth through efficient resource use, driven by clearer price signals and, where possible, by competitive markets.

In the early 1980s, a major inter-departmental review of the Crown's role in the electricity industry commenced, looking to separate operational from other functions, improve commercial performance and introduce commercial disciplines for trading activities.

2. 1986: First Government decisions on electricity reform

The Government announced its decision to reform its trading activities, including the generation and transmission sectors of the electricity industry. In addition, an inter-departmental committee was set up to develop and co-ordinate distribution reforms.

3. April 1987: Electricity Corporation of New Zealand (ECNZ)

ECNZ was set up as a company under the State-Owned Enterprises (SOE) Act to own and operate the generation and transmission assets of the Ministry of Energy. Policy and regulatory activities were separated out and largely retained in the Ministry of Energy.

The SOE Act was a component of the Government's moves to improve the performance and accountability of the public sector. SOEs are companies in which nominated Ministers hold all the shares, and the enterprises negotiate annual

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1 The Government had been supplying a limited number of large consumers since before the reforms in this chronology commenced.

2 These ESAs included 38 special purpose local authorities operating under the Electric Power Board Act 1925 (“Boards”), 21 municipal electricity departments of territorial local authorities (“MEDs”), and two government owned authorities (Southland Electric Power Supply and Chatham Islands Electricity System).

Statements of Corporate Intent (SCIs) with shareholding Ministers. SOEs operate with commercial structures and incentives and with the principal objective of being successful businesses.

4. April 1987: ESAs subject to income tax

ESAs were subject to income tax from the year beginning 1 April 1987.

5. December 1987: Electricity Task Force

The Task Force comprised members from Government departments, ECNZ and ESAs. The terms of reference covered advice to the Government on the structure and regulatory environment for electricity industry.

6. January 1988: Electricity Amendment Act 1987

The Electricity Amendment Act 1987 came into force on 1 January 1988, removing the need for the Minister of Energy to approve all new hydro generation proposals.

7. April 1988: Transpower - subsidiary of ECNZ

ECNZ organised its activities so that Transpower was set up to run the transmission network as a subsidiary of ECNZ, which became solely a generator.

8. September 1989: Task Force recommendations

The Task Force's key recommendations were:

- Separate ownership of generation and transmission
- No large-scale break-up of generation
- Further study of limited generation break-up and creation of a wholesale market (subject to this, ECNZ to be privatised)
- Transmission to be owned by a club of generators and distributors
- ESAs to be corporatised and privatised
- Removal of statutory franchise areas and obligation to supply
- Development of a light-handed regulatory regime, drawing on the Commerce Act 1986 supported by public information disclosure

9. January 1990: Abolition of Ministry of Energy

The Ministry of Energy was abolished with effect from December 1989. That Ministry's policy, regulatory and other non-commercial roles were transferred to the new Energy and Resources Division (now the Energy & Communications Branch) of the Ministry of Commerce (now the Ministry of Economic Development). A small number of residual and transitional Ministry of Energy commercial responsibilities were transferred to The Treasury.

10. May 1990: Corporatisation of ESAs

The Government announced that ESAs would be corporatised, with ownership by local trusts. MEDs (Municipal Electricity Departments owned by territorial authorities) were to remain in local authority ownership.

11. July 1990: Transpower Establishment Board

A Transpower Establishment Board was set up to oversee the establishment of Transpower as a separate corporate entity from ECNZ, with a plan for “club” ownership of Transpower. The Board's brief was subsequently widened to consider other ownership forms.

12. August 1990: Electric Power Boards Amendment Act 1990

The Government appointed commercial directors to electric power boards with effect from October 1990. Existing board members became trustees, and were to hold shares when boards were corporatised. Trustees were subsequently elected.

13. June and September 1991: Transpower Establishment Board

In its report to the Government, the Establishment Board recommended ownership of Transpower by a "club" of ESAs and generators. The Board also recommended a process for separation of Transpower from ECNZ (including valuation, gearing and pricing).

14. 1991: Energy Sector Reform Bill[3]

This Bill contained provisions facilitating the corporatisation of ESAs and a wide range of regulatory measures.

There was extensive public debate about the appropriate ownership of ESAs. The Bill provided for polls of local consumers (in the case of Electric Power Boards) and ratepayers (in the case of MEDs) to determine appropriate share distributions.

The Bill was later split to become five separate acts, including the Energy Companies Act 1992 and the Electricity Act 1992[4].

15. 1992: Parliamentary report on wholesale and retail electricity pricing

A Parliamentary Committee reported that it had found no justification for wholesale price rises proposed by ECNZ, and advocated increased efficiency in retail pricing.

16. May-July 1992: Electricity shortage

In early May ECNZ advised of the effect of drought on South Island hydro storage lake levels and outlined actions being taken to conserve storage. With the level of inflows to the lakes dropping further the situation deteriorated to such an extent that by early June a call had been made for voluntary savings of 10% of demand.

A combination of electricity savings by the public and generation initiatives by ECNZ continued into July when inflows to the South Island lakes began to increase. In early August the power savings were called off.

17. June 1992: Officials Committee on Energy Policy (OCEP)

OCEP was given the task of co-ordinating energy policy advice to Government, replacing previous inter-departmental committee arrangements on energy policy issues.

18. June 1992: Energy policy framework

The Government confirmed its energy policy framework:

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[3] This Bill also addressed corresponding issues in the gas sector.

[4] Refer 17, 22.

"The Government's key objective in the energy area is to ensure that energy services continue to be available at the lowest cost to the economy, consistent with sustainable development.

"This will be achieved by the efficient and effective provision of energy services through properly functioning commercial systems with competitive incentives. These systems will work within an effective and stable regulatory environment and take energy conservation into account."

Note: A new energy policy framework was released in 2000 (refer 52).

19. July 1992: Energy Companies Act 1992

This Act provided for the corporatisation of the ESAs. Ownership of boards[5] became the subject of share ownership plans that were incorporated in establishment plans, and which took account of views expressed in local consultations. Trustees were to consider the share allocation plans. The Minister of Energy was to approve the establishment plans (the Minister's role in regard to ownership was to ensure that the prescribed process was carried out).

Diverse ownership patterns resulted. Broadly:

- Trust ownership was most favoured
- Majority private shareholding resulted in some cases
- MEDs and a small number of boards were owned by local government
- There were many combinations of the above

20. October 1992: Wholesale Electricity Market Study (WEMS)

As generation reform and the creation of wholesale market arrangements had been given less attention than distribution and retailing, more concerted attention was given to the generation sector.

WEMS was a private sector initiative which recommended a major evolution of existing market arrangements to provide a predictable price path for wholesale electricity, and to enable some trading at marginal prices. Competition with ECNZ (the dominant generator) was envisaged.

21. October 1992: WEMS critique

The Government sought an independent review of the WEMS report.

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[5] The Act provided that, while MEDs were to prepare establishment plans, ownership of their shares was to be vested in the associated territorial local authorities.

22. October 1992: Energy Efficiency and Conservation Authority (EECA)

The Government set up EECA to develop, implement and promote strategies to improve energy efficiency.

23. February 1993: WEMS critique

The critique presented to Government identified five areas for further development:

- Pricing of tradable contracts
- Ground rules of market operation, with the threat of heavier regulatory oversight
- Oversight of the performance of the wholesale market in improving energy efficiency
- Need for wider review of the wholesale electricity market proposals, including by parties not involved in WEMS
- Possibility of evolutionary development if one-step introduction of new arrangements turned out to be impracticable

24. April 1993: Electricity Act 1992

The Act provided for:

- Deregulation (the removal of distributors' statutory monopolies and of the obligation to supply)
- Information disclosure, focused particularly on natural monopolies
- Temporary provision for price control for domestic consumers
- Safety matters
- Land access
- Role and wind up of Rural Electrical Reticulation Council (RERC)[6]
- Compulsory maintenance of line services until 2013 (20 years)

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[6] The RERC had been set up in 1946 to help fund electricity reticulation in rural areas, drawing on finance from a levy on electricity sales.

25. April 1993: First franchise removal

This was the first stage of removal of statutory distribution and retail monopolies (and the obligation to supply), allowing competition for sales to retail consumers.

Franchise restrictions were removed for small consumers first (i.e. under 0.5 GWh per annum) to avoid the possibility that they might face the costs of a cross-subsidy, since competition for larger consumers was expected to be stronger.

26. May 1993: Transpower separation (first announcement)

Government announced the decision to separate Transpower from ECNZ. Club ownership was seen as difficult to implement, so the Government decided to establish Transpower as a stand-alone Crown-owned company. Special legislation was required.

27. June 1993: Wholesale Electricity Market Development Group (WEMDG) established

The Government announced its decision to establish the Wholesale Electricity Market Development Group (WEMDG).

The Group's terms of reference included the development of specific, cost-effective proposals for a wholesale electricity market that, consistent with sustainable development, would ensure that wholesale electricity is delivered at the lowest cost to the economy.

WEMDG comprised a range of representatives from interested parties (including a new entrant generator and consumers), and included wide consultation. Some Government funding was provided, and two Government observers attended.

28. June 1993: Government policy on renewable energy

Framework objective:

> *"To facilitate the development of cost-effective renewable energy consistent with the Government's Energy Policy Framework."*

The Government's energy sector reforms were seen as a good basis for encouraging renewables. Enhancements of the opportunities for the cost-effective application of renewable energy were announced, including work on identification of the barriers to renewable energy.

29. 1993: Electricity Market Company (M-co)

The Electricity Market Company (subsequently renamed The Market Place Company) was set up to support the electricity market framework for wholesale trading.

Key steps included:

- Commencement of an on-line secondary market in trading ECNZ's hedge contracts, including provision of market information
- Establishment of a market surveillance committee to admit new entrants and supervise conduct
- Administration of the Metering and Reconciliation Information Agreement (MARIA) which recorded and reconciled flows to meet the needs of parties contracting in the wholesale and retail markets. Under the MARIA agreement, Transpower, as National Reconciliation Manager, reconciled information against contracts and passed information for billing back to market participants

30. April 1994: Second franchise removal

This was the second stage of removal of statutory distribution and retail monopolies (and the obligation to supply), allowing competition for supply to all consumers. Small consumers (i.e. under 0.5 GWh pa) had been contestable since April 1993. In this second stage, franchise restrictions were removed for larger consumers.

31. April 1994: Transpower separation (second announcement)

The Government amended its announcement of May 1993, preferring to set up Transpower as a stand-alone SOE. The separation of Transpower from ECNZ took place on 1 July 1994.

32. July 1994: Information Disclosure Regulations

The Electricity (Information Disclosure) Regulations (revised 1999 – refer 47) came into force. These regulations required public disclosure of:

- Separate audited financial statements for natural monopoly and potentially competitive businesses (and methodologies)
- Prices and other main terms and conditions of contracts

- Financial performance measures, based on standard asset values (ODV[7]) and with removal of any elements of double counting of asset-related expenditure
- Efficiency and reliability performance measures
- Costs and revenues by tariff category (and methodologies)
- Line charges (and methodologies)

33. August 1994: WEMDG report to Government

The draft WEMDG proposal was published in March 1994.

In its final report (August 1994), WEMDG recommended:

- Earliest establishment of competitive wholesale market.
- Sale of most electricity under long term, tradable contracts
- Establishment of a voluntary pool and spot market, operated by a neutral entity
- Independent Transpower
- Steps to stem ECNZ's dominance, including progressively leasing approximately 40 per cent of ECNZ's plant and constraints on new investment
- Levy to promote energy efficiency and conservation.

34. June 1995: Wholesale electricity market

The Government made provisional announcements on the steps it would take in the lead up to the opening of the wholesale electricity market:

- ECNZ to be split into two competing SOEs (ECNZ and Contact Energy[8])
- ECNZ's Maui gas contract to be transferred to Contact Energy
- ECNZ's proposals for new Taranaki plant to be sold (including associated gas supply)
- Six small hydro plants owned by ECNZ to be sold
- Remaining assets of ECNZ and Contact Energy not to be sold

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7 Optimised Deprival Value, i.e. the lesser of Optimised Depreciated Replacement Cost (ODRC) and Economic Value (net present value of future cash flows)

8 At the time of this announcement, Contact Energy was temporarily known as “EC-2”.

- Special constraints on ECNZ to apply until its market share fell to 45% (cap on building new capacity, ring-fencing new capacity and a high level of firm capacity to be offered by tender for long-term contracts)

- Five year fund of $18 million to support energy efficiency in the domestic sector

35. November 1995: ECNZ restructuring

Government confirmed its June 1995 wholesale electricity market decisions, following consultations with Maori, confirmation of the viability of ECNZ's restructuring and the reform timetable.

36. February 1996: Contact Energy

Contact Energy commenced operations as an SOE generator in competition with ECNZ. Contact Energy took over the former ECNZ power stations at Roxburgh, Clyde, New Plymouth, Wairakei, Ohaaki, Otahuhu, Stratford and Whirinaki, which represented 22% of total electricity production. The company also took over ECNZ's contracts for Maui gas.

A set of special restraints was applied to ECNZ until such time as its market share fell below 45% (refer 33).

37. June 1996: Future direction for regulation of telecommunications, electricity and gas

An extended legal dispute over interconnection pricing for telecommunications had culminated in a Privy Council decision endorsing a pricing rule (Baumol-Willig) which (in the Government's view) had the potential to lessen competition. This legal outcome prompted the Government to reappraise light-handed regulation of vertically integrated monopolies.

In June 1996, the Government confirmed its reliance on competition to achieve efficiencies in telecommunications, electricity and gas services in order to promote user benefits. At the same time, however, it declared its resolve to take additional regulatory action if it was not satisfied that vertically integrated network owners and potential competitors were negotiating in good faith to arrive at commercial solutions in a timely manner.

38. October 1996: Wholesale electricity market

The competitive wholesale electricity market commenced under a multilateral contract - the New Zealand Electricity Market (NZEM). M-co was contracted to act as Market Administrator, Clearing Manager and Pricing Manager while Transpower took on the roles of Scheduler and Dispatcher.

Electricity prices were based on bids and offers from market participants (i.e. generators, purchasers and traders), and the price was not capped. The spot market was supplemented by trading of longer-term hedge contracts.

39. September 1997: Revised objectives for Transpower

Transpower's objectives were revised to more strongly emphasis the need for it to continually improve the efficiency of transmission services, by making the services contestable wherever possible and producing customer-driven services at least cost. The key outcome sought by the Government was to reduce transmission costs, as a percentage of total electricity costs, on a sustainable basis.

Transpower initiated a review of the way grid security standards were set and maintained by establishing the Interim Grid Security Committee (IGSC). It was charged with developing a conceptual framework for grid security policy consistent with a Government policy statement on the matter.

This involved establishing a self-governing arrangement for the industry in setting standards for common quality including security, a contractual structure for implementing agreed common quality standards, and a robust monitoring, compliance and dispute resolution process. This work was incorporated in the proposed Multilateral Agreement on Common Quality Standards (MACQS).

40. February 1998: Major Auckland CBD electricity failure

On 20 February 1998 the Auckland central business district (CBD) suffered a major electricity supply outage resulting from a series of four failures of Mercury Energy's cables supplying the CBD. The effects of these failures impacted, to a large degree, on some parts of the CBD for up to five weeks.

In March the Government established a Ministerial Inquiry into the failure, the report of which was published in July 1998. The key findings were:

- Criticism of the risk management, contingency planning, operations and asset management practices of Mercury Energy and its predecessor (Auckland Electric Power Board)

- Issues with the corporate governance structure of the company which contributed to the circumstances leading up to the failure

An outcome of the inquiry was the requirement for lines companies to publish their Asset Management Plans.

41. April 1998: Electricity generation, distribution and retail reforms

The Government announced a package of reforms to generation, distribution and retail. The outcomes sought were vigorous competition wherever possible and effective regulation of natural monopoly businesses. Key features:

- The decision, in principle, to split ECNZ into three SOEs - Huntly and Tongariro; Waikato hydros; Waitaki and Manapouri
- Ownership separation of line and energy businesses
- Lines businesses, which do not face competition, to face increased risk of price control if they do not deliver best possible prices to consumers
- Strengthening the Electricity (Information Disclosure) Regulations 1994 and the ODV handbook for valuing lines businesses
- The Government to publish improved analysis of disclosed information to enable better comparisons of the performance of power companies
- The industry to establish low-cost switching arrangements to enable customers to change retailers; the Government to introduce a mandatory default system if the industry failed to deliver within 12 months

42. July 1998: Electricity Industry Reform Act 1998

The Act required full ownership separation of distribution (lines) businesses from supply (retail and generation) businesses. The main reasons for the separation were to encourage competition in generation and retailing and to prevent cross-subsidisation of generation and retailing from lines customers. These cross-ownership restrictions were subsequently relaxed twice to allow lines businesses to own some generation and to sell the output from those stations. The Act was revoked by the Electricity Industry Act 2010, but some of its provisions were carried over into the new Act.

43. September 1998: Sale of Contact Energy

The Government announced its decision to scope the sale of state-owned generator Contact Energy. Contact Energy was reported to have a book value of $860 million.

In March 1999 the Government announced the sale of a 40 percent cornerstone shareholding in state-owned generator/retailer Contact Energy to US-based Edison Mission Energy for $NZ1.208 billion.

The Government subsequently sold its remaining share of Contact Energy in May 1999, to more than 225,000 investors at $NZ3.10 per share. The Government's revenue from the sale of Contact Energy, including the 40 percent sold in March 1999 to Edison Mission Energy, was more than $NZ2.3 billion.

44. April 1999: ECNZ split

New Zealand's largest electricity generator - state-owned enterprise ECNZ - was split into three competing state-owned generators. The new companies, which commenced trading on 1 April 1999, were:

- Genesis Power Ltd (based in Manukau City) - Huntly and Tongariro power stations and existing electricity retailer First Electric)
- Meridian Energy Ltd (based in Wellington) - Waitaki hydro system and Manapouri power station)
- Mighty River Power Ltd (based in Auckland) - Waikato hydro system)

45. April 1999: Separation of ownership of electricity lines and supply businesses

The Electricity Industry Reform Act 1998 required electricity companies to separate ownership of their line and supply businesses by 31 December 2003, and to undertake interim corporate separation by 1 April 1999. In the event, the industry chose to move more quickly, completing ownership separation before 1 April 1999. At that date, there were seven retailers, many owned by generators (including the three SOE generators). Merger activity over the period of ownership change was less pronounced among lines businesses, of which there were 32 on 1 April 1999.

46. April 1999: Inauguration of system for switching electricity retailers

The electricity industry launched a profiling system that enabled consumers to switch electricity retailers easily. The system was part of MARIA and administered by wholesale market administrator The Marketplace Company Ltd (M-co). The ability for consumers to switch retailers was a requirement of the Government's 1998 electricity reforms.

47. April 1999: Revised Information Disclosure Regulations

The Electricity (Information Disclosure) Regulations 1999 came into force, replacing the 1994 version of the regulations. The new regulations:

- removed disclosure requirements from retailers and generators
- tightened rules for accounting and for calculating performance measures
- introduced new measures of reliability performance

- required line owners to disclose asset management plans and security standards, as recommended by the Ministerial Inquiry into the Auckland power failure

- provided for much disclosed information to be made available on the Internet

The regulations were revoked in April 2004.

48. November 1999: Industry self-governing arrangements for grid security

Following authorisation by the Commerce Commission of the Multilateral Agreement on Common Quality Standards (MACQS) in August 1999 and signing of MACQS by industry participants, the Grid Security Committee (GSC) was formed in early November 1999. The GSC consisted of an independent chair, three elected representatives from generators, an elected representative from retailers and a representative each from of the group of local networks, grid owner, domestic end-user group, commercial end-user group and industrial end-user group.

The functions of the GSC were to evaluate proposals to change parts of MACQS, oversee the Common Quality Co-ordinator contracting arrangements, admit members to MACQS, appoint mediators and arbitrators for disputes, carry out or participate in certain reviews, and perform other such functions and tasks as given to the GSC under MACQS.

49. February 2000: Electricity Industry Inquiry

The Government announced a Ministerial Inquiry into the electricity industry on 3 February 2000. The Terms of Reference for the Inquiry required it to consider what changes were needed to ensure that New Zealanders have the best possible electricity system. The Inquiry was asked to focus on distribution and retailing, the wholesale market and the transmission grid.

50. June 2000: Electricity Industry Inquiry report

The Ministerial Inquiry into the Electricity Industry reported to the Government in June 2000 and its report was subsequently publicly released.

The Inquiry panel supported continuation of the self-regulation approach, but recommended further evolution of the existing arrangements in the electricity industry as well as introduction of targeted price control for electricity lines businesses.

51. October 2000: Power Package

The Government's decisions on electricity sector reform were announced in the 'Power Package' in October 2000. These announcements followed the Ministerial

Inquiry into the Electricity Industry, the recommendations of which were broadly accepted, either directly or in a modified form.

The Government stated that it favoured industry solutions where possible, with regulation only where necessary. A draft Government Policy Statement was released outlining the Government's expectations for further evolution of the self-regulatory arrangements in the electricity industry.

The Government announced that it would introduce legislation which would enable it to make regulations should the governance board fail to deliver.

52. October 2000: Energy Policy Framework

A revised Energy Policy Framework was released. The Government's overall objective was "to ensure the delivery of energy services to all classes of consumers in an efficient, fair, reliable and sustainable manner."

53. October 2000: Electricity Governance Establishment Committee

An Electricity Governance Establishment Project (EGEP) was established, and a committee appointed in October 2000 in response to the Government's request, set out in the GPS, that the industry put in place a single self-governance structure. The Committee worked to create a single governance structure for the electricity industry, which would bring together the three existing industry governance structures (NZEM, MACQs and MARIA), and to establish an Electricity Governance Board.

54. November 2000: Electricity Industry Bill

The Electricity Industry Bill was tabled in Parliament in November 2000. It was an omnibus bill amending various Acts to give effect to the Government's response to the recommendations of the Ministerial Inquiry.

55. December 2000: Government Policy Statement

Following consultation with industry participants, a "Government Policy Statement (GPS): Further Development of New Zealand's Electricity Industry" was released in December 2000. The GPS was subsequently transmitted to the Commerce Commission under section 26 of the Commerce Act (Commission to have regard to economic policies of the Government).

The GPS required the electricity sector to establish a new electricity governance board: to develop rules for the industry in the areas specified, consistent with the Guiding Principles outlined. The GPS included other requirements on the industry.

The GPS was revised in February 2002.

56. August 2001: Electricity Industry Bill

The Electricity Industry Bill 2000 was enacted in August 2001. The Act amended four statutes (the Ministry of Energy Abolition Act 1989, the Commerce Act 1986, the Electricity Act 1992 and the Electricity Industry Reform Act 1998).

Key features of the legislation were:

Commerce Amendment Act (No. 2) 2001:

- the Commerce Commission may control the price or revenue of electricity line businesses which breach thresholds set by the Commission (no Ministerial decision on control is involved)

- the Commerce Commission will take over the administration of the electricity information disclosure regime including a review of the appropriate asset valuation methodology

The Electricity Amendment Act 2001:

- the Government may establish by Order in Council as a Crown entity, an Electricity Governance Board, if negative reports are received on the governance board established by electricity sector; or if the industry is unable to establish a governance board

- the Government may make regulations on a number of matters, including a requirement to provide domestic consumers with a low fixed charge tariff option, electricity governance, a complaints resolution system, hydro spill and hedge prices.

Electricity Industry Reform Amendment Act 2001:

- slight relaxation of rules on ownership of electricity generation by lines companies, including enabling unlimited ownership of renewable generation

57. July-September 2001: Supply shortage

Low lake levels, coupled with unusually high demand for electricity, resulted in a shortage of electricity in the winter of 2001. Wholesale electricity spot market prices rose sharply as a result.

As uncertainty in electricity supply and wholesale prices increased, the Minister of Energy initiated industry meetings from late July to early September. During this period the Government implemented a 10-week conservation campaign of a 10 percent saving in electricity use by the public and a 15 percent saving by the government sector. This initiative, along with temporary relaxation of transmission security and greater use of thermal generation, ensured supply was maintained without interruption.

58. September 2001: Post-winter review

After the risk of power shortages was averted, the Minister of Energy announced a review of the way in which the electricity system functioned over the winter of 2001.

The main conclusions of the review, announced in December 2001, were:

- The electricity price spot market worked much as expected during winter 2001, with very high prices signalling an increasingly tight supply situation and record demand

- The market would have worked better if the reforms specified in the Government Policy Statement (refer 55) had been fully implemented (such as improved information disclosure, demand-side participation in the market, and mechanisms to invest in the grid to relieve transmission constraints)

- Some major retailers and large users were seriously under-hedged against dry-year spot prices. Although hedges were available, several years of surplus generating capacity and record low spot prices affected buyers' assessments about investing in hedges

- As a consequence of experience in 2001, increased awareness of dry-year risk was likely to result in better risk management. More sophisticated (and liquid) hedge and contracting arrangements were likely to emerge

- New Zealand is facing the need to build new generation capacity in the next few years to meet rising demand. This means that wholesale market prices on average are likely to trend towards the long run marginal cost (LRMC) which is set by the cost of new generating capacity. This will also lead to upwards pressure on retail prices, as retail margins adjust back to long-term averages

59. January 2002: Establishment of Electricity Complaints Commission

At the Government's request an Electricity Complaints Commission was established to provide electricity consumers with assistance in resolving complaints about electricity lines or retail companies. The Commission is funded by member companies but remains independent of the industry. The Commission does not charge complainants for any assistance provided.

There are three main components of the scheme:

- Code of Practice – each member company agrees to maintain the standards in the Code for all their dealings with customers

- Internal Complaints Process – each company must provide a formal complaints process for customers who are not happy with some facet of the company's service. Any consumer with a complaint must follow the individual company's formal complaints process before approaching the Commission

- Complaints Commissioner – an independent, qualified person who will help customers resolve a complaint if the company has not resolved it in a

satisfactory manner. The Commissioner can award money to a customer if a company is found to be at fault

From April 2005 the scheme was extended to cover gas complaints, and was renamed the Electricity and Gas Complaints Commission.

60. April 2002: Reporting of hydro-spill

As proposed in the Government Policy Statement (refer 55), the Electricity Governance Establishment Project developed a regime for the disclosure of hydro spill by major generators. Under the draft rules each hydro generator was required to report hydro spill information to the Governance Board quarterly within four weeks of the end of 31 March, 30 June, 30 September and 31 December in each year. The first reporting period was for the March 2002 quarter. Links to each generator's hydro spill reports are given below:

- Contact Energy; Genesis Power; Meridian Energy; Mighty River Power; TrustPower.

61. July 2002: Hedge index

A further initiative proposed in the Government Policy Statement (refer 55) was the development of an index for fixed price electricity contracts. The index was designed to provide some means of establishing a forward price curve for electricity.

62. July 2002: Disclosure of generator offers and demand bids

All bids and offers from 29 May 2002 were made publicly available four weeks after the day on which they were submitted.

63. December 2002: Government Policy Statement on Financial Transmission Rights

The Government required the electricity industry to make new arrangements to manage wholesale electricity price risks caused by transmission line congestion.

The Policy Statement set out the Government's expectations for the development of financial transmission rights (FTRs), which could be used by wholesale market participants as protection against price spikes caused when transmission lines operate at full capacity. It established a set of guiding principles and a framework for the development of FTRs, including an auction market for trading them. It also specified how the regime would be governed.

(This Policy Statement was superseded by the October 2004 Government Policy Statement on Electricity Governance and the Electricity Commission became responsible for completing this work.)

64. February 2003: Redetermination of Maui gas reserves

The Government received the final redetermination of gas reserves from the independent expert carrying out the review of the Maui field, which confirmed that the Maui reserves were lower than originally estimated by about 238 PJ. Taking into account total usage to date, this meant that approximately 370 PJ of Maui gas remained to be recovered at the Maui contract price.

65. March-June 2003: Winter supply shortage

The Government identified the prospect of a dry year for New Zealand's hydroelectric system, and an electricity savings campaign was planned and implemented progressively with the assistance from the electricity industry's Grid Security Committee and Winter Power Group.

The Government subsequently set a 15 percent electricity savings target for the government sector in order to provide leadership in electricity savings to help reduce the risk of winter power shortages. The public was asked to endeavour to achieve savings of 10%.

66. April 2003: New electricity governance arrangements

The Government gave notice that it was preparing to establish a new governance board for the electricity industry in case the industry failed to reach agreement on a new self-governance structure.

67. May 2003: Establishment of Electricity Commission

The Government announced that a new Electricity Commission would be established to take over governance of the electricity industry. The Commission would secure reserve generation to ensure that New Zealand's electricity needs could be met even in very dry years without power savings campaigns. This would involve significant changes to the electricity sector designed to deliver long-term electricity supply security and to curb extreme price volatility in the electricity spot market in dry years.

The Commission would be responsible for managing the electricity sector so that electricity demand could be met in a 1-in-60 dry year without the need for national power conservation campaigns. It would do this by contracting with generators for the provision of dry year reserve generation capacity and fuel.

68. July 2003: Whirinaki power plant for security of supply

The Government announced that a new 155 megawatt oil-fired power plant would be built before winter 2004 to help provide increased certainty of electricity supply. It would be sited at Whirinaki, Hawkes Bay, and would provide reserve generation for use during very dry periods when hydro lake inflows were abnormally low. It would also provide reserve generation to cover major breakdowns in other generating plant. Contact Energy would install and operate the Government-owned plant at its Whirinaki site.

69. September 2003: Further Government decisions on reserve energy

The Government announced further details of the reserve generation policy. The Electricity Commission would be expected to contract for low fixed cost options for reserve energy, which would tend to have high variable costs. New generation plant and plant that would otherwise be mothballed or retired would both be eligible to be considered for reserve energy. In addition, the Commission could contract with large electricity users for demand reductions as part of the reserve energy portfolio.

The Commission would be able to contract for reserve energy up to a maximum of 1200 gigawatt-hours (GWh) over a four-month period, the equivalent of 400-500 megawatts (MW) of thermal plant and/or load. Generation plant that had been ring-fenced as reserve energy would only be available to protect electricity security, which would minimise any impact of reserve energy on incentives to build ordinary generation facilities.

The costs of reserve energy would initially be recovered by means of a levy pending consideration by the Commission of alternatives to a levy.

70. September 2003: Electricity Commission and draft Government Policy Statement on Electricity Governance

The Electricity Commission was established - Roy Hemmingway (Chair), David Close, Douglas Dell, Peter Harris, Graham Pinnell and Christine Southey - and began operations on 14 September 2003. The costs of the Commission were to be recovered from the electricity industry via a levy.

A revised draft Government Policy Statement on Electricity Governance, setting out key improvements to the electricity industry that the Government expected the Commission to oversee in addition to its routine governance responsibilities, was released for consultation (item 78).

71. December 2003: Electricity (Hazards from Trees) Regulations 2003

New regulations governing the trimming of trees near power lines came into effect. These were designed to promote safety and help prevent power outages and fires caused by problems with trees and power lines.

72. March 2004: New electricity market arrangements under Electricity Governance Rules and Regulations (made December 2003)

The new arrangements, which came into effect under rules and regulations made in December 2003, terminated the former operations under the New Zealand Electricity Market and the Metering and Reconciliation Information Agreement (MARIA). The Electricity Commission took over responsibility for operating the electricity market.

73. April 2004: New regulatory framework for transmission investment and pricing

A new regulatory framework for transmission investment and pricing was announced to come into effect on 28 May 2004. The elements of which would progressively be put in place. The process required the Electricity Commission to publish its own Statement of Opportunities, which was an assessment of the future adequacy of the electricity system. The Commission would also develop grid reliability standards and a grid investment test, which would be used to guide grid upgrade plans. The Commission would then assess Transpower's proposed grid upgrade plan, including consideration of alternatives to specific investments. Transpower would be unable to recover the costs of grid investment without Electricity Commission approval. Other elements of the process included Commission approval of a transmission pricing methodology and development of a benchmark transmission agreement.

74. June 2004: Whirinaki reserve generation plant

This 155MW station was commissioned on 1 June 2004, and was intended to help provide increased certainty of electricity supply. It would only run when the limits of the electricity system were tested by problems such as low inflows to the hydro lakes or a major generation or transmission breakdown. It was owned by the Government and responsibility for issuing instructions on when it would operate were transferred to the Electricity Commission from 1 April 2005.

75. August 2004: Risk-sharing agreement with Genesis Energy to facilitate construction of combined cycle plant at Huntly

The Government announced that it would facilitate the development of Genesis Energy's [external link] 385 MW combined cycle gas turbine plant (known as e3p) at Huntly by agreeing to share a limited amount of risk with Genesis around the long term supply of gas, as a one-off arrangement. This commitment ensured that

Genesis Energy could proceed with the development within normal commercial parameters.

76. September 2004: Electricity (Low Fixed Charge Tariff Option for Domestic Consumers) Regulations 2004

New regulations came into force compelling all electricity retailers to make available a domestic tariff, the fixed charges portion of which must not exceed 30 cents per day excluding GST. This tariff would benefit consumers who used less than the average 8000 kWh of power per year.

77. October 2004: Electricity and Gas Industries Bill

The Bill updated the Electricity Act to reflect the establishment of the Electricity Commission. This included updating the specific outcomes that the Government wanted the Commission to achieve, including security of supply and energy efficiency. It also provided improved regulation-making powers, in particular to enhance security of supply and consumer protection.

The Bill also amended to Electricity Industry Reform Act to ease restrictions on lines companies owning electricity generation.

The Bill amended the Commerce Act to clarify the interface between the functions and powers of the Commerce Commission and the Electricity Commission relating to control of prices, revenues and quality standards for electricity distribution businesses.

78. October 2004: New Government Policy Statement on Electricity Governance

A new Government Policy Statement (GPS) on Electricity Governance covering the responsibilities and direction of the Electricity Commission was published. It set out the priorities of the Commission as -

- Managing security of supply and implementing the reserve energy mechanism;
- Working with Transpower and grid users to facilitate priority investment in the grid;
- Promoting efficient use of electricity; and
- Improving hedge market transparency and liquidity, and demand-side participation.

This GPS superseded the GPS released in December 2000 and the February 2002 revision.

79. October 2004: Sustainable energy discussion document

A comprehensive discussion document on the future of sustainable energy in New Zealand was released. It was designed as the focal point for six months of consultation, the outcome of which would be the starting point for formal sustainable energy policy development. The document explored what a sustainable energy system might look like and how New Zealand might achieve it.

80. August 2005: Resource Management and Electricity Legislation Amendment Act

This Amendment Act improved the Resource Management Act 1991 and made amendments to the Electricity Act 1992 to improve the quality of decisions and processes by increasing certainty and reducing delays, costs and incorrect use of processes, while ensuring appropriate public participation and the meeting of environmental objectives. The six main objectives were:

- Enabling central government to better express the national interest so that decision makers had clear guidance on taking national interest matters into account;
- Enabling consent processes to be undertaken in an effective and efficient manner that provided certainty of process for applicants;
- Improving the effectiveness of planning documents and enabling their timely development;
- Improving certainty of consultation requirements for resource management matters;
- Providing certainty over the allocation of resources; and
- Providing for the environmental effects of high voltage electricity works in road corridors to be managed using Resource Management Act processes.

81. June 2006: Auckland electricity blackout

An electricity blackout of the central business district and southern suburbs of Auckland occurred on 12 June 2006 when component failure resulted in an earth wire falling across live conductors at Transpower's Otahuhu substation. Around 1,000 MW of supply was lost at about 8.30 am, with power being restored to various parts of Auckland between six and nine hours later. Subsequent investigations revealed shortcomings in maintenance procedures and the need to diversify supply into Auckland.

www.transpower.co.nz/?id=6058

82. August 2006: Investment regime for transmission and distribution

Two draft Government policy statements to encourage investment in infrastructure were released.

The first was a consultation draft of proposed amendments to the Government Policy Statement on Electricity Governance to emphasise the strategic importance attached to timely investment in transmission infrastructure. It followed record electricity demand on the grid, a significant transmission outage in Auckland and delays in decisions on Transpower's proposed North Island grid upgrade.

The second was a published statement of the Government's economic policy under s26 of the Commerce Act, and focused on the importance of regulated businesses such as Transpower and electricity lines businesses investing in new lines and other infrastructure. It was intended to give businesses the confidence and incentives to make new investments.

www.med.govt.nz/templates/MultipageDocumentTOC____21483.aspx

83. October 2006: Updated Government Policy Statement

An updated Government Policy Statement on Electricity Governance, designed to improve the quality and timeliness of decision-making on transmission, was released. This superseded the Government Policy Statement of October 2004.

The revised statement was designed to:

- Emphasise the importance of security of supply in transmission, including in extreme events, by providing for diversity of supply routes, especially for large load centres like Auckland;
- Ensure that the grid facilitated competition in generation and minimised transmission constraints; and
- Ensure that transmission planning supported the Government's goal of facilitating renewable energy.

www.med.govt.nz/electricity/gps/

84. December 2006: Electricity Market Review

A review of the electricity market, prompted by ongoing concerns about security of supply and price increases, was completed. The review concluded that the performance of electricity market arrangements had been mixed, and that while the current regulated market should be retained, a range of enhancements should be pursued to improve performance, particularly regarding security of supply.

Areas identified for further work included:

- Security of energy supply;
- Security of the grid and electricity lines;
- Wider issues affecting security of supply;
- Wholesale market design and competition issues;
- Transmission pricing;
- Assistance to low-income households;
- Energy efficiency initiatives; and
- Institutional arrangements and role clarity.

Legislative amendments to facilitate investment in generation by lines companies were also proposed.

www.med.govt.nz/electricity/market-review/

85. July 2007: Electricity Commission approval of Transpower's proposal for a new transmission line into Auckland

In April 2006 the Electricity Commission issued a draft decision to decline Transpower's proposal to build a new 400 kV line between Whakamaru and Auckland. The Commission considered that there were alternatives which would provide the same level of electricity security but would be less expensive than the proposed 400kV line, and at that stage could not therefore approve the proposal.

In May 2006 Transpower suspended its application to construct the line in order for discussions to be held with the Commission. In October 2006 Transpower submitted an amended proposal and the Commission withdrew its draft decision to decline the original application.

www.electricitycommission.govt.nz/opdev/transmis/auckgridinvest/index.html

In January 2007 the Electricity Commission announced that it intended to approve a suite of measures proposed by Transpower to improve the reliability of electricity supply into Auckland and on to Northland. The main feature of Transpower's proposals was a new 400 kV transmission line between Whakamaru and Pakuranga (Auckland). The line would operate initially at 220 kV.

86. August 2007: Electricity Governance (Connection of Distributed Generation) Regulations

These regulations were drawn up to enable connection of distributed generation in conformity with consistent connection and operational standards. They specified:

- a framework for connection of distributed generation;
- processes (including time frames) under which generators can apply to distributors for approval to connect distributed generation (including the information to be exchanged and the criteria for approval);
- the regulated terms that apply to the connection of distributed generation in the absence of contractually agreed terms;
- a default dispute resolution process for disputes related to these regulations;
- the pricing principles to be applied for the purposes of these regulations; and
- prescribed maximum fees.

87. October 2007: New Zealand Energy Strategy

In July 2006 the terms of reference for the development of a New Zealand Energy Strategy (NZES) were released. The strategy was intended to identify priorities to achieve the Government's energy objectives of:

- Reliability and resilience;
- Environmental responsibility; and
- Fair and efficient prices for energy for current and future generations.

The final strategy was released in October 2007. It was intended to set the country on a path towards clean, renewable energy, in accordance with the Government's vision for a sustainable, low-emissions energy system, and included an action plan to make that vision a reality.

The Strategy included a target of generating 90 per cent of New Zealand's electricity from renewable energy sources by 2025.

www.med.govt.nz/upload/52164/nzes.pdf

88. October 2007: Revised New Zealand Energy Efficiency and Conservation Strategy

A revised New Zealand Energy Efficiency and Conservation Strategy (NZEECS) was launched alongside the Energy Strategy. It provided an action plan to:

- Promote sustainability as part of New Zealand's national identity;
- Improve the quality of life for New Zealand families; and
- Drive economic transformation in business

It was an action plan for many of the programmes in the NZES, and its programmes were complementary to the Emissions Trading Scheme in achieving emissions reductions.

The NZEECS targets actions in five areas:

- Energywise homes
- Energywise businesses
- Energywise transport
- Efficient and renewable electricity systems
- Government initiatives

www.eeca.govt.nz/about/national-strategy/nzeecs-index.html

89. March 2008: National Policy Statement on Electricity Transmission

This National Policy Statement on Electricity Transmission requires decision makers to consider the national significance of a reliable and secure electricity supply - as well as adverse environmental effects - when assessing proposals for New Zealand's national transmission grid. It gives guidance to local governments across the country about the management and future planning of the national grid.

Its main purpose is to make it explicit that electricity transmission is a matter of national significance under the Resource Management Act, as an efficient and well-managed national grid is vital for communities, the environment and businesses across the country. The statement ensures that there is a balanced consideration of national benefits and local effects of electricity transmission. It contains 14 policies intended to facilitate the operation, maintenance and upgrade of the existing network and any new transmission networks, while at the same time managing any adverse environmental effects of the network and managing the adverse effects of other activities on the network.

www.mfe.govt.nz/rma/central/transmission/index.html

90. April 2008: Electricity (Disconnection and Low Fixed Charges) Amendment Act

In response to concerns about the disconnection practices of electricity retailers, the Electricity Commission developed new guidelines for disconnections resulting from non-payment of electricity accounts, particularly where vulnerable consumers are affected. The Amendment Act ensured that the government can, if necessary, regulate the content of the guidelines.

The Electricity (Low Fixed Charge Tariff Option for Domestic Consumers) Regulations 2004 required networks and retailers to provide a low fixed charge tariff option to domestic consumers who use less than 8,000 kWh of electricity per year at their primary dwelling. The Amendment Act altered this requirement by providing for the definition of a ‘‘low-use consumer’’ to vary according to the particular area of New Zealand in which the consumer’s domestic premises was situated, in order to take account of differing climatic conditions. Area boundaries, defined in amended regulations which came into force in April 2009, specify 9,000 kWh per year for Christchurch and points south but excluding the West Coast.

www.med.govt.nz/electricity/lfc-amend/

91. April 2008: New transmission pricing methodology

In June 2007 the Electricity Commission recommended a Transmission Pricing Methodology (TPM) to the Minister of Energy. The TPM was included as schedule F5 to section IV of part F of the Electricity Governance Rules, effective from 1 April 2008. The Electricity (Transpower's Pricing Methodology) Regulations 2004 were revoked in July 2008.

www.electricitycommission.govt.nz/rulesandregs/rules

92. May 2008: Updated Government Policy Statement on Electricity Governance

The Government Policy Statement on Electricity Governance (GPS) was revised and updated to be consistent with the New Zealand Energy Strategy and New Zealand Energy Efficiency and Conservation Strategy, and to reflect changes since the GPS was originally released in October 2004.

The changes included:

- documenting a target of generating 90 per cent of electricity from renewable sources by 2025;
- providing for an assessment of ways in which wind generation could best be integrated into the system alongside geothermal and other forms of generation;
- requiring consideration of the need for grid upgrades to transfer renewable electricity from the point of generation to the points of consumption; and
- updating reserve energy policy in line with the outcome of a comprehensive review carried out by the Electricity Commission.

www.med.govt.nz/electricity/gps/

93. May-July 2008: Winter supply shortage

During 2008 the driest March - June period since 1947 was recorded. By June hydro storage had approached the Emergency Zone, indicating a roughly 10 percent chance of electricity cuts being required. Constant monitoring and evaluation of conservation options by the Electricity Commission, with assistance from the electricity industry, included a public awareness campaign led by the industry encouraging all consumers to use power prudently and make savings whenever possible. The campaign was discontinued in mid-July.

The Commission undertook a review of its experience in managing dry year risk, and looked at the performance of arrangements in the lead up to winter, the market

responses once it became evident that supply would be tight, and the operation of the reserve energy scheme.

94. July 2008: Review of electricity market design by Electricity Commission

Retail competition and prices, energy affordability and methods of paying electricity generators were key focus areas of a review of the performance of the electricity market which began in 2007.

An options paper released in July 2008 examined in detail five key areas of concern to stakeholders, and developed a range of options to address them. The five areas were:

- pricing and competition, especially in the retail market
- energy affordability issues
- the effectiveness of the energy-only spot market design
- demand-side participation
- availability of market information

www.electricitycommission.govt.nz/consultation/MDRoptions

The recommendations concerning improving electricity market performance that came out of the Market Design Review project were integrated with other priority projects under the Market Development Programme.

95. September 2008: Electricity Industry Reform Amendment Act

This Act implemented three main policy changes.

The first made it easier for owners of lines businesses to sell the output of the generation they were permitted to own under the 2001 and 2004 amendments to the Electricity Industry Reform Act 1998. The objective was to encourage the owners of lines businesses to invest in permitted generation, especially generation from renewable energy sources.

This policy objective was achieved by:

- allowing sales of electricity of up to 100% of the nominal annual output capacity of permitted generation (Previously, allowed sales were the actual output of the generating station, which could be very variable over time, especially in the case of generation from a renewable energy source, making it difficult to retail to customers.)

- allowing electricity generated from permitted generation to be traded via financial hedges to manage spot market risks

- lowering the cost of corporate separation and compliance with arm's-length rules by –

- raising the threshold for requiring compliance to 10 MW (up from the higher of 5 MW or 2% of maximum demand);
- allowing the same person to be a director of both lines and supply (generation and retailing) businesses, while requiring at least one independent director and not permitting executive directors;
- allowing the same person to be a manager of both companies up to a threshold of 30 MW (Joint staff and premises are permitted without limit).

The second main change narrowed the scope of ownership separation requirements to focus on the geographic areas where there is potential for the exercise of market power and anti-competitive practices – namely, where lines and supply are co-located. This was achieved by allowing owners of lines businesses to be involved in generation and retailing without limits outside of their lines area. Requirements for corporate separation and compliance with arm's-length rules outside their lines area were also to be repealed.

Existing ownership separation rules were retained where lines and supply are co-located, because co-owned, co-located lines and supply businesses have both incentive and ability to lessen competition in retailing and local generation. Ownership separation removes this incentive and ability. Where co-located cross-ownership of lines and supply was permitted in order to encourage investment in permitted generation, corporate separation and the requirement to act on an arm's-length basis was retained in order to reduce the risks of anti-competitive behaviour.

The third main change amended the definition of renewables. Previously the owner of a lines business could only invest without quantity limitations in "new renewables", which were defined to exclude hydro and geothermal generation using traditional technologies. The new definition included all renewables, to reflect the government's policy of encouraging the development of renewable energy.

96. September 2008: Climate Change (Emissions Trading and Renewable Preference) Act

This Act established the New Zealand Emissions Trading Scheme and legislated the government's preference for new renewable electricity generation.

The preference for new renewable generation was achieved through the introduction of a 10-year restriction on new baseload fossil-fuelled thermal electricity generation, except to the extent required to ensure the security of electricity supply. This took effect through a new part 6A added to the Electricity Act 1992, with the provisions applying to any proposed thermal generation above 10 megawatts that used more than 20 percent of fossil fuels as its fuel source.

This measure gave legislative backing to the policy outlined in the New Zealand Energy Strategy, and ensured that privately-owned and publicly-owned generators operated under the same conditions. Exemptions to the prohibition would be possible in some circumstances, including when thermal generation was appropriately mixed with renewables or based on waste products, where it was needed in an emergency or to ensure security of supply, or where the needs of isolated communities were most logically met by thermal generation. The Electricity Commission would recommend whether an exemption was warranted.

The renewable preference provisions were repealed in December 2008.

97. September 2008: Commerce Amendment Act

This Act included a new Part 4 of the Commerce Act (replacing former Parts 4 and 4A) which put in place improved regulatory regimes for electricity lines businesses. An objective was to provide for efficient and cost-effective regulation of infrastructure services, such electricity lines businesses, which are not subject to competition. All OECD countries regulate these types of services because they are essential and because, in the absence of regulation, suppliers could charge excessive prices or provide poor quality service.

The Act aimed to promote outcomes consistent with those produced by competitive markets, including providing incentives to invest, innovate and make efficiency gains, while requiring suppliers to share gains with consumers and to limit excessive profits.

A major improvement to the current regime was a provision requiring the Commerce Commission to develop rules, requirements and procedures, collectively called "input methodologies", for regulation. The Act required the Commission to set input methodologies for electricity lines businesses by 30 June 2010.

The Act also provided for 100 percent consumer-owned lines businesses (about 16) to be subject only to information disclosure regulations, because the consumers, as owners, are able to influence the rates of return and price-quality trade-offs made by the business. The remaining lines businesses (about 11) are now subject to a new default/customised regime (as well as information disclosure), instead of the Part 4A thresholds regime.

As part of the new electricity lines regime, the Commerce Commission was required to provide incentives to improve energy efficiency and demand-side management, and to reduce energy losses, as part of the government's commitment to address climate change.

98. September 2008: Electricity (Continuance of Supply) Amendment Bill

Section 62 of the Electricity Act 1992 requires electricity lines companies to maintain services to those connections established as at 1 April 1993. This section expires and is deemed to be repealed on 31 March 2013. Lines built from April 1993 are not affected by this repeal.

The government decided in May 2008 that the supply of electricity to consumers in remote rural areas would continue to be protected beyond 2013 by revising section 62 of the Act so that the obligation to supply those places would no longer expire in 2013. This obligation would be able to be met by using either lines or, where local consumers agree, alternative local generation.

The Bill was discharged and its provisions were incorporated in to the Electricity Industry Bill – refer item 115

www.med.govt.nz/electricity/cont-supply/

99. September 2008: HVDC upgrade

The Electricity Commission gave final approval for Transpower to spend up to $672 million on upgrading Pole One of the HVDC link between the South and North Islands.

The HVDC proposal is a two-stage project that will involve construction of new converter station facilities at Haywards and Benmore and decommissioning of the old equipment. The two HVDC poles will have a capacity of 1200 MW when stage 2 is completed in 2014. The project does not include replacement of the existing transmission line and submarine cables.

www.electricitycommission.govt.nz/news/electricity-commission-gives-final-approval-to-hvdc-upgrade

100. September 2008: Draft National Policy Statement on Renewable Electricity Generation

The government's intention to prepare a national policy statement for renewable electricity generation was announced in the New Zealand Energy Strategy as a key action in support of the government's sustainable energy goals. It will also complement the New Zealand Energy Efficiency and Conservation Strategy, and will help strengthen the policy framework relating to renewable energy and the control of greenhouse gas emissions.

The proposed Statement will establish the national significance of benefits associated with renewable electricity generation by clarifying the government's position on these benefits. It will help promote a nationally consistent approach to balancing the competing values associated with the development of renewable energy resources, and will provide greater certainty to decision-makers, applicants and the wider community.

www.mfe.govt.nz/rma/central/nps/generation.html

101. April 2009: Ministerial review of electricity market

A Ministerial review of the electricity market was announced, with the review team being supported by a technical advisory group of six independent experts. The review was to examine market design and regulation and governance issues, drawing on work done by the Electricity and Commerce Commissions as input to the review.

102. May 2009: Revised Government Policy Statement on Electricity Governance

A revised version of the GPS was issued to reflect current government policies, with a particular emphasis on accelerated prudent transmission grid investment in the interests of enhanced security of supply. The statement introduced a streamlined and simplified process for approval of grid investments under $20 million in value.

www.med.govt.nz/upload/67862/may2009_gps.pdf

103. May 2009: Report on electricity company breaches of Commerce Act

In late 2005 the Commerce Commission opened an investigation into whether any participants in the wholesale or retail electricity markets may have breached Part 2 of the Commerce Act, after a number of complaints relating to high electricity prices, large company profits, a perceived low level of competitive activity and alleged anti-competitive activity were received. The Commission engaged Professor Frank Wolak of Stanford University to assist with this work.

The Commission found no evidence of breaches of the Act, although it did issue one warning regarding a risk of a breach. A summary was published in the Commission's media release No 130 of 21 May 2009 –

www.comcom.govt.nz/business-competition-media-releases/show/2009/May

www.comcom.govt.nz/investigation-into-new-zealand-electricity-markets-may-200

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www.comcom.govt.nz/business-competition-media-releases/show/2009/May

www.comcom.govt.nz/investigation-into-new-zealand-electricity-markets-may-2009

106. September 2009: North Island transmission grid upgrade project

Transpower received final approval from the Electricity Commission for its proposal to construct a new transmission line between Whakamaru (central North Island) and the southern limits of Auckland city. The project will provide essential security of supply to the upper North Island, and will be one of the largest infrastructure projects to be built in New Zealand, with 185km of overhead transmission line, 10km of underground cable and new substation works.

www.gridnewzealand.co.nz/nigup-home

107. October 2009: High voltage DC contract

Transpower awarded the principal contract for construction of Pole 3 of the high voltage direct current (HVDC) inter-island link. This project, worth up to $672 million, involves replacing the 44-year-old Pole 1 equipment at Haywards substation north of Wellington and Benmore substation in the South Island with modern thyristor converters. The project will increase the capacity of the overall HVDC link to 1000 MW in 2012 and 1200 MW in 2014. The Pole 3 project is a major component of the wider investment plan to reinforce the national transmission grid. The HVDC link is critical to balancing the energy use between the North and South Islands.

108. December 2009: Outcome of Ministerial Review of Electricity Market

A range of changes to New Zealand's electricity system were announced, designed to improve competition and constrain price increases, increase security of supply, and ensure effective and stream-lined governance, the majority of which were contained in the Electricity Industry Bill 2009 (enacted 2010).

Key initiatives included:

- transferring Tekapo A and B power stations from Meridian Energy to Genesis Energy, and transferring the government-owned Whirinaki to Meridian Energy;
- requiring Meridian Energy, Genesis Energy and Mighty River Power to undertake "virtual asset swaps" through a 15 year contract, ensuring the ability of each

company to provide increased competition in the island where they currently had little or no generation capacity;
- requiring all major electricity generators to put in place an accessible electricity hedge market;
- allowing lines companies back into electricity retailing, subject to strict controls; and
- establishing a $15 million fund over three years to promote customer switching between retailers.

Initiatives to increase security of supply included:

- requiring generators or retailers to compensate consumers in the event of conservation campaigns or a dry-year power cut;
- abolishing the reserve energy scheme; and
- increasing the attractiveness of gas exploration and development.

Initiatives to ensure effective governance included:

- abolishing the Electricity Commission and replacing it with a slimmed-down Electricity Authority, with far fewer objectives and functions than the Commission;
- establishing a Security and Reliability Council to monitor Transpower's performance and advise on security of supply; and
- transferring responsibility for grid upgrade approvals to the Commerce Commission.

www.med.govt.nz/electricity-market-review

109. March 2010: Advanced Metering Infrastructure (AMI) recommendations

The Electricity Commission reported to the Minister on whether the roll-out of AMI (smart meters) in New Zealand should be regulated, and whether the voluntary guidelines around technical aspects of AMI were adequate.

The Commission concluded that:

- differences in the New Zealand electricity market compared with other countries meant that reasons for regulating AMI overseas did not apply to New Zealand;
- the current roll-out of AMI was happening within an acceptable timeframe;
- AMI technology was not fully developed and could become obsolete;
- there was a high level of compliance with the current voluntary guidelines; and
- regulating the roll-out of AMI could create additional costs for consumers for no additional benefit.

www.ea.govt.nz/industry/market/metering/advanced-metering/

110. April 2010: Electricity and Gas Complaints Commission (EGCC) Scheme

The Electricity and Gas Complaints Commission (EGCC) was approved by the Electricity Commission and the Associate Minister of Energy in December 2009.

Approval of the scheme's status was confirmed in the Electricity Industry Act 2010 [s.95(3)(a)]. From April 2010, the EGCC is the single electricity and gas complaints scheme to which all retailers, lines companies and Transpower must belong.

www.egcomplaints.co.nz

111. June 2010: Establishment of liquid hedge market

The five largest electricity companies (Contact Energy, Genesis Energy, Meridian Energy, Mighty River Power and TrustPower) jointly entered into an agreement with the Australian Securities Exchange to support the trading of new Zealand electricity futures and options.

112. October 2010: Electricity Industry Act

The Electricity Industry Act 2010 provided a framework for the regulation of the electricity industry. The Act modified the governance arrangements in the electricity industry, replacing parts of the Electricity Act 1992.

The Act disestablished the Electricity Commission and replaced it with an Electricity Authority, allowed lines businesses back into retailing, incorporated revised continuance of supply provisions and reconfigured some assets of the three State-owned generators (Genesis Energy, Meridian Energy and Mighty River Power).

The Act incorporated provisions relating to ownership separation of electricity distribution from supply (retail and generation) businesses from the revoked Electricity Industry Reform Act 1998. It also lifted barriers to lines companies retailing electricity, subject to certain conditions.

The Electricity Authority was established under powers provided in this Act.

113. November 2010: Electricity Authority

The Electricity Authority was established on 1 November (replacing the Electricity Commission). Its members were Dr Brent Layton (Chair), Susan Paterson, Elena Trout, David Bull and Roger Sowry.

www.ea.govt.nz

114. November 2010: Changes to governance rules and regulations

The 2003 Electricity Governance Regulations and Rules were replaced on 1 November with the Electricity Industry (Enforcement) Regulations 2010 and the Electricity Industry Participation Code 2010 respectively.

http://www.med.govt.nz/sectors-industries/energy/electricity/regulatory-framework/electricity-industry-regulations/electricity-industry-enforcement-regulations-2010

115. November 2010: Revocation of GPS and section 26 statements to the Commerce Commission

The Government Policy Statement on Electricity Governance was revoked on 1 November 2010 as it was no longer consistent with the governance regime established under the 2010 reforms. The policy statement on infrastructure investment for regulated businesses (also issued to the Commerce Commission under section 26 of the Commerce Act 1986 in 2006) was also revoked as the expectations in this statement had been included in Part 4 of the Commerce Act.

116. November 2010: Consumer switching fund

A 3.5 year, $15 million fund was established on 1 November 2010, to be administered jointly by the Electricity Authority and the Ministry of Consumer Affairs. The Authority promotes to consumers the benefits of comparing and switching retailers through its “What’s My Number?” campaign, which commenced in May 2011.

In 2014 a further three years funding totalling $7.5 million was provided to the Electricity Authority, and the project was renamed theFacilitating Customer Participation programme.

117. December 2010: Security and Reliability Council

A Security and Reliability Council was established in December 2010 to provide independent advice to the Electricity Authority on the performance of the electricity system and the system operator, along with reliability of supply issues. It is chaired by Dr Kevin Thompson.

www.ea.govt.nz/our-work/advisory-working-groups/src/

118. January 2011: Virtual asset swaps

Virtual asset swap contracts between the SOE electricity retailing companies, designed to help promote retail competition, came into effect on 1 January 2011. The swaps were covered by one-off, long-term (15-year) contracts under which:

- Meridian Energy sells 1,000 GWh per year of “South Island” energy to Mighty River Power and buys 1,000 GWh per year of “North Island” energy from Mighty River Power

- Meridian Energy sells 450 GWh per year of “South Island” energy to Genesis Energy and buys 450 GWh per year of “North Island” energy from Genesis Energy.

119. June 2011: Transfer of Tekapo A and B stations to Genesis Energy

The transfer of Tekapo A and B power stations from Meridian Energy to Genesis Energy took effect on 1 June 2011. The transfer of the stations were part of the package of measures agreed by Cabinet in December 2009 following the Ministerial Review of the Electricity Market, and reflected the fact that Meridian Energy had little generation in the North Island and Genesis Energy had none in the South Island. This move allowed consumers greater choice and encouraged the SOEs to compete as nation-wide suppliers.

120. August 2011: New Zealand Energy Strategy 2011-2021; New Zealand Energy Efficiency and Conservation Strategy 2011-2016

A New Zealand Energy Strategy 2011-2021 was released. It set the strategic direction for the energy sector and the role that energy would play in the New Zealand economy. It focuses on four priorities to achieve this: diverse resource development; environmental responsibility; achieving efficient use of energy; and promoting energy security and affordability.

A New Zealand Energy Efficiency and Conservation Strategy 2011-2016 was released in association with the Energy Strategy. It set out energy efficiency, energy conservation and renewable energy policies, objectives and targets for 2011-2016 and the means by which these would be achieved. It sets objectives and targets for the transport, business, homes, products, electricity systems and public sectors.

www.med.govt.nz/upload/77402/NZ%20Energy%20Strategy%20LR.pdf

121. November 2011: Report on s.42 of Electricity Industry Act

The Electricity Authority reported to the Minister of Energy and Resources on the successful completion of the requirements of s.42 of the Electricity Industry Act 2010. Matters in s.42 were considered crucial for improving the performance of the electricity market and the Authority had one year to complete them.

http://www.ea.govt.nz/about-us/documents-publications/

122. December 2013: Consumer Guarantees Act Amendment (Consumer Law Reform Bill) passed

The Consumer Law Reform Bill, introduced in April 2011, which included amendments to the Consumer Guarantees Act, passed. It amends the Consumer Guarantees Act to provide a tailor-made guarantee of acceptable quality that applies to the supply of electricity and reticulated gas.

The Bill also provides for a statutory indemnity of electricity and gas retailers by distributors and Transpower.

These provisions came into force on 17 June 2014. See http://www.consumeraffairs.govt.nz/for-business/compliance/quality-of-your-goods-or-services/electricity-or-gas

123. October 2014: Fire at Penrose sub-station

A fire at Transpower's Penrose sub-station on 5 October 2014 caused a power outage affecting around 85,000 households and businesses in parts of Auckland for over two days.

The Minister of Energy and Resources requested, under the previously unused section 18 of the Electricity Industry Act, that the Electricity Authority undertake an inquiry of the outage and report to him. The inquiry report is expected in November 2015.