

~ *Into the Future* ~  
1996 – 2000

**From Electricity Trust to ETSA Corporation**

At the beginning of 1996, ETSA had just passed through what seemed to be the most tumultuous phase of its fifty-year history. The inevitable onset of the National Electricity Market (NEM), the major internal reforms, and the external pressures of the State and Federal Governments had seen the development of an entirely new, commercially focused entity. ETSA Corporation, created through a Government Act of 1994, was now the umbrella for a group of separate business organisations that included ETSA Transmission Corporation.



An important change that the re-appraisal of ETSA Corporation's structure had brought about, as a result of the approaching NEM, was that ETSA Transmission had taken over direct financial responsibility for the management of assets and liabilities for the 275kV and 132kV networks. Additionally, it was responsible for the power station 66kV switchyards and any 66kV interconnections between those switchyards and the main transmission network. The South Australian commitment to the onset of

*TRANSMISSION TOWERS  
BLEND INTO A  
FOREGROUND OF RURAL  
BEAUTY, NEAR  
BIRDWOOD, IN THE  
ADELAIDE HILLS  
ELECTRANET SA*



ANTHONY SMITH  
ELECTRANET SA



GREG RICE  
ELECTRANET SA

the new electricity market was demonstrated in a \$10 million project for new metering arrangements to track customers and measure energy movement on the electricity transmission network for the competitive market.<sup>1</sup> The activities of the transmission business had at this stage been transferred to the ETSA buildings at East Terrace and Pirie Street.

Those involved with ETSA Transmission during this time of ‘disaggregation’ – that is, of the establishment of discrete companies without the old contacts of ETSA – saw important changes. Ex-employee

Anthony Smith (previously Transmission Assets Auditor) and Roland Schulz noted that ETSA Transmission actually evolved in a climate of political necessity.<sup>2</sup> Barry Foster (previously Executive Manager Transmissions Operations) and Phillip Webb (Executive Manager Operations) agree that the biggest change in the move from ETSA to ETSA Transmission was the creation of those enterprises as external companies that owned different parts of the power system.<sup>3</sup> It was, they conclude, ‘a cultural shift from stewardship to ownership’.<sup>4</sup> As a result, System Control was ring fenced within ETSA Transmission as the independent market and power system operator to manage formal commercial agreements, and electricity trading processes were established to replace the previous co-operative arrangements.

Greg Rice (Executive Manager Engineering and Construction) and Alex Wyschnja (Project Manager) commented that ETSA Transmission still managed to keep much of the personal, human touch of the previous ETSA.

They argue that the new organisation was full of people with a ‘can do’ attitude: ‘we had a business to establish and being pro-active was a key focus’.<sup>5</sup> There was a sense, they contend, in which the creation of ETSA

Transmission provided the ‘freedom’ to investigate new ideas and new approaches for the business.<sup>6</sup>

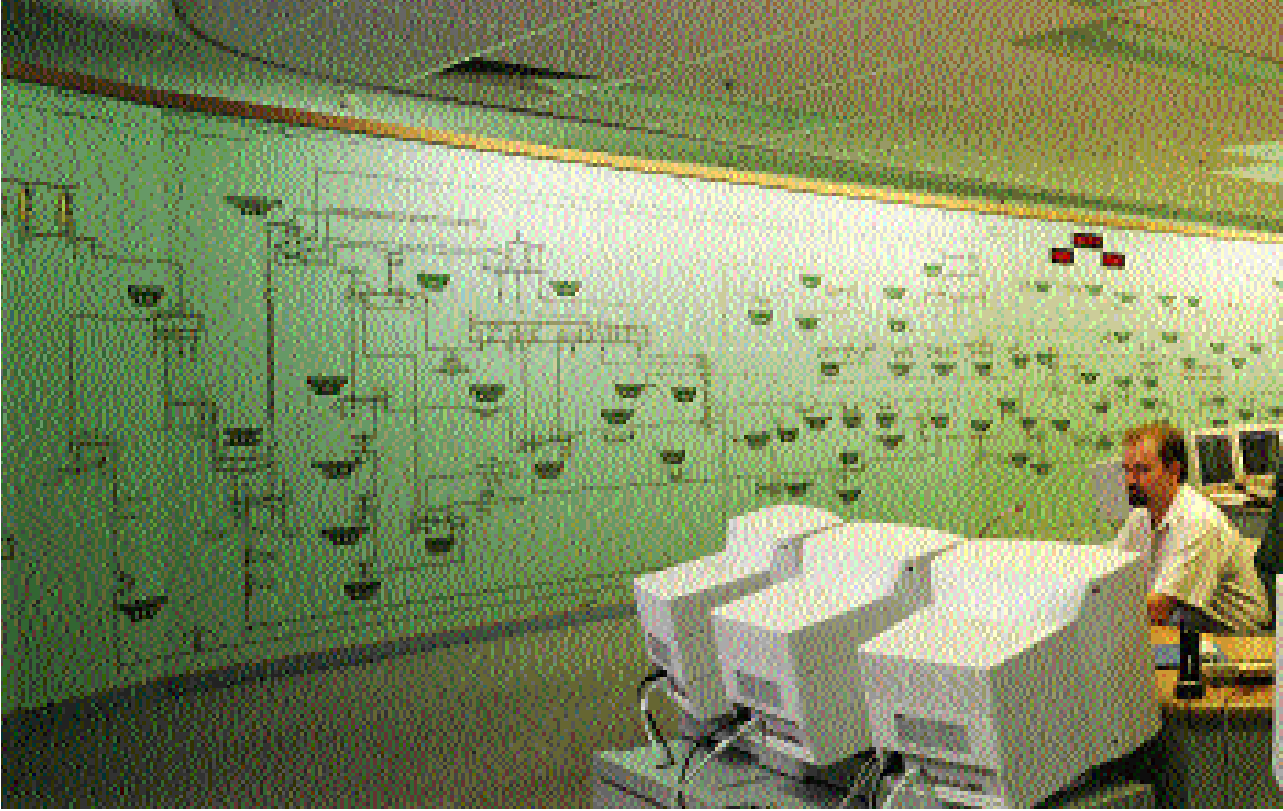
By 1997–98, ETSA Transmission had become a tight-knit unit. A ‘regulated monopoly business’, it was ‘responsible for the management and development of the high voltage network assets and for service delivery to directly connected customers in South Australia’.<sup>7</sup> The company was involved in an international benchmarking study to analyse costs for operations and maintenance – research that concluded that its maintenance management practices were amongst the best in the world. The development of the transmission network was further expanded as customer demand in South Australia continued to grow, with the establishment of major new substations and lines. The onset of the NEM and associated transmission access arrangements effectively blocked an agreement for ElectraNet SA to be involved in the construction of a 275kV interconnection system with New South Wales in 1998; however, additional major transmission work was constructed by ElectraNet SA during this period to connect new generating plant at Port Lincoln, Ladbroke Grove (Penola West) and Pelican Point (LeFevre Peninsula), to satisfy the ever increasing demands of the South Australian electricity customers.



ALEX WYSCHNJA  
ELECTRANET SA

### **NEMMCO and the start-up of the National Electricity Market**

The origins of the NEM were much to do with the political necessities of the age. It was planned that the Market would ‘introduce competition in the wholesale supply and purchase of electricity ... [that would, in turn] promote a more flexible, cost effective and efficient electricity industry with the ultimate objective of delivering lower electricity prices to business and the general community’.<sup>8</sup> ETSA Transmission management had anticipated the steady move from State to Federal regulation of the NEM and were ready for its inception.



SYSTEM CONTROL  
OFFICERS WATCH OVER  
THE WORKINGS OF  
SOUTH AUSTRALIA'S  
ELECTRICITY SUPPLY  
NETWORK  
ELECTRANET SA

Barry Foster and Phillip Webb describe the lengthy process in the early days of the NEM, following the break-up of ETSA and the formation of ETSA Transmission:

After the decision to implement a competitive wholesale electricity market the development of a National Electricity Code was required to support the proposed network access and electricity trading arrangements. The NEM was a long time in coming. Development started in earnest, in 1992. In 1994 the NEM 'paper trial' was undertaken to test the impact of the new rules and the official national competitive electricity market start occurred on 13 December 1998. The advent of the NEM had tremendous impact from the point of view of the control of the South Australian power system. Previously System Control was relatively autonomous and had overall control of the power system in South Australia. Under the NEM, the market operations, generation dispatch and power system security were to be undertaken by



NEMMCO in accordance with the National Electricity Code. The role of the System Control Centre has since changed, to focus on the management of operational risks for ElectraNet SA in meeting contractual and regulatory obligations for the delivery of transmission services. Many of the previous power system operational activities are now undertaken as an agent to, or in response to, NEMMCO requirements, or in accordance with the arrangements for contracted services that are provided for the various other asset owners (generators or distributors). These organisational authority changes require a change in culture, and the traditional engineering oriented skills need to be supplemented with skills in the areas of commercial, legal, risk management, liabilities and contracting – to cope with the deregulated, competitive market environment, while still being capable of handling any emergency situation on the power system in South Australia.<sup>9</sup>



KYM TOTHILL  
ELECTRANET SA

In August 1998, Kym Tohill, who had been General Manager of ETSA Transmission Corporation, was subsequently appointed Chief Executive of the 'separated' transmission organisation in preparation for its launch into the NEM. Then, in October 1998, ETSA Corporation effectively ceased operating as a centralised entity and its disaggregated business units (transmission, distribution and

electricity retailing) took over its previous accountabilities. At that time, ETSA Transmission Corporation became known as ElectraNet SA.<sup>10</sup> A Board was appointed to oversee the operation and management of the ElectraNet SA business, comprising David Lindh as Chairman, and David McNeil, Clive Hall and Kym Tohill as Directors. On 13 December 1998, ElectraNet SA commenced operation as a 'regulated monopoly transmission network owner and operator in the new competitive National Electricity Market environment'.<sup>11</sup>

### **Innovation**

From its inception, and partly because of the foresight of its management, ElectraNet SA had a penchant for innovative solutions to complex business, maintenance and construction problems. Having come to grips with its competitive environment, ElectraNet SA very quickly took on the concept of 'managing the assets and bringing in the services' necessary to maintain them.<sup>12</sup> The business has taken this notion a step further. Through its programme of strategic alliances for major capital works, it has pioneered an approach to new electricity infrastructure developments.<sup>13</sup>

ElectraNet SA staff are enthusiastic about these initiatives. Greg Rice and Alex Wyschnja comment again on how well the new structure



FOUR VIEWS OF THE ELECTRA<sup>NET</sup> SA TEAM – (ABOVE): TONY BILLETT (SENIOR FIELD OFFICER) BRIEFING RACHAEL TOMLINS (MEDIA AND COMMUNICATIONS OFFICER) ON LINE MAINTENANCE ISSUES ON THE 275kV TRANSMISSION SYSTEM; (PAGE 84 TOP): MEREDITH MURDY, LEFT (CEO'S EXECUTIVE ASSISTANT) AND MANDY EVANS (RECEPTIONIST) IN THE FOYER OF ELECTRA<sup>NET</sup> SA'S CORPORATE HEADQUARTERS; (PAGE 84 BOTTOM): KATHRINE HINZE, LEFT (TECHNICAL SUPPORT ENGINEER) AND CAROLYN WILSON (SUBSTATION MANAGEMENT SUPPORT OFFICER) CONDUCTING A ROUTINE SUBSTATION MAINTENANCE CHECK; (PAGE 85): MATTHEW NAPOLITANO (GRADUATE ENGINEER) CONDUCTING TRANSFORMER GAS-IN-OIL DIAGNOSTIC TESTING THROUGH AN ON-LINE MONITORING SYSTEM INSTALLED BY ELECTRA<sup>NET</sup> SA ELECTRA<sup>NET</sup> SA

has worked and how it has provided creative results in a number of areas:

An innovative approach for ElectraNet SA operations has been adopted whereby all of our construction maintenance services are contracted. There is no other electricity transmission organisation in Australia at the moment that has adopted this model, but ElectraNet SA's success will undoubtedly change that.







ANTHONY SMITH, LEFT,  
(TRANSMISSION SYSTEM  
AUDITOR) AND MARIA  
CHRISTOU  
(ENVIRONMENTAL CO-  
ORDINATOR) INSPECTING  
A SUBSTATION STORM  
WATER RETENTION  
FACILITY  
ELECTRANET SA

ElectraNet SA has established an alliance contract with a construction and engineering company for carrying out some of its construction works – the first that has been performed by any part of the electricity industry in Australia, or indeed by any Government enterprise in South Australia. ElectraNet SA is searching for and pinpointing new technologies and application developments which provide the freedom to canvass broader industry to select the most cost effective organisation that embraces best practice and efficient methodology.<sup>14</sup>

Others at ElectraNet SA speak equally enthusiastically of the organisation's ability to initiate new approaches. Anthony Smith, for



instance, notes the advances made in the installation of high quality metering equipment.<sup>15</sup> Others recall the introduction of a computer-based system to handle emergency call-out numbers,<sup>16</sup> and to implement the most up-to-date methods of radio telecommunications.<sup>17</sup> ElectraNet SA is recognised as an industry leader in South Australia for the implementation of market and operational information systems to support technical and commercial operations in the NEM. Additionally, ElectraNet SA's Technology Services Division provides a range of state-of-the-art specialist laboratory and field testing services for companies with high voltage systems and plant. Indeed, optimisation of asset life and providing early warning of impending failure of high voltage plant is a high priority. Nevertheless, even with all the changes in its approach to the management

SUNRISE AT MOUNT  
BARKER, SOUTH  
AUSTRALIA, COVERING A  
SECTION OF  
ELECTRANET SA'S  
TRIPLE CIRCUIT  
TRANSMISSION SYSTEM  
ELECTRANET SA



*ELECTRANET SA,  
BOARD OF DIRECTORS.  
LEFT TO RIGHT: DAVID  
MCNEIL, KYM TOTHILL,  
CLIVE HALL AND DAVID  
LINDH (CHAIRMAN)  
ELECTRANET SA*

of its business, personnel safety is still the highest priority.

In relation to its transmission network, ElectraNet SA continues to deal with the inevitable environmental influences that are beyond its control. Just as it happened 20 years earlier, a severe wind storm passing through the mid-north of South Australia, in early December 1999, demolished four 275kV transmission towers and flattened 22 poles of one of the 132kV transmission lines. The impact on the electricity consumers was negligible and the repairs were completed before the peak of summer electricity demand.

### **A world of private ownership**

The outcome of the disaggregation of ETSA Corporation had been the preparation of the subsidiaries, like ElectraNet SA, for sale or leasing into



*ELECTRANET SA, EXECUTIVE MANAGEMENT TEAM:  
 GAVIN BRENNAN (EXECUTIVE MANAGER ASSET  
 MAINTENANCE); GREG RICE (EXECUTIVE MANAGER  
 ENGINEERING AND CONSTRUCTION); BOB STAM  
 (EXECUTIVE MANAGER CUSTOMER DEVELOPMENT AND  
 REGULATION); VICKI BROWN (EXECUTIVE MANAGER  
 CORPORATE AFFAIRS); PHILLIP WEBB (EXECUTIVE  
 MANAGER OPERATIONS); IAN STIRLING (EXECUTIVE  
 MANAGER FINANCE AND ADMINISTRATION) AND  
 BARRY FOSTER (PREVIOUSLY EXECUTIVE MANAGER  
 TRANSMISSION OPERATIONS); KAY NOLTE, NOT PICTURED,  
 (EXECUTIVE MANAGER INFORMATION SYSTEMS)  
 ELECTRANET SA*

the private sector by the South Australian Government. This followed the privatisation announcement by the State Premier, John Olsen, on 17 February 1998. Barry Foster and Phillip Webb believe that leasing of the business provides a unique opportunity to show the staff's 'innovative skills' and the ability to adapt. Any new owner will readily see a well-structured business, with valuable people who have quality systems implemented for managing and operating the South Australian transmission assets.<sup>18</sup>

Greg Rice and Alex Wyschnja also have the sense of impending challenge. They describe the future in the following terms:

The move to new ownership will bring new challenges. It is an exciting time. Part of our agenda will be to deliver our new infrastructure projects at the best possible price – given the appropriate quality and standards – so that it really enhances the value of the business in the future. That is where the business is already heading. ElectraNet SA's major asset is its people, who are of a very high calibre and extremely competent. They are much sought after in the electricity industry.<sup>19</sup>

ElectraNet SA is entering another phase of major change – perhaps the most important turning point in the history of South Australia's electricity supply industry. Just as the pioneers of AESCo struggled to establish a reliable electricity supply network around Adelaide, and later, in the post-Second World War boom, when ETSA set out to rapidly extend the electricity supply across the vast expanse of South Australia, so now, too, ElectraNet SA is primed to pioneer new ways of managing the South Australian transmission network as a private business in a new competitive environment. Its people are part of a strong, enduring heritage, and remain extremely capable of planning for, and contributing to, the future growth and prosperity of South Australia.