

Power Deals

Cross-border mergers and acquisitions
in the global electricity market 2001



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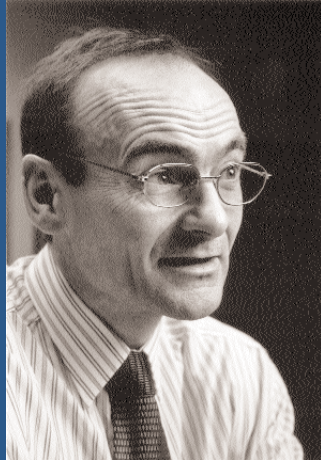
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A year of consolidation

Overview



Stakes were higher in the global electricity sector in 2001. Big deals expanding reach were accompanied by significant retrenchments. Although the overall level of cross-border deal-making diminished, E.ON AG's US\$13.8 billion (bn) bid for Powergen was more than four times higher than the largest deal in 2000. Companies continue to seek opportunities to become bigger international players and to build scale around their strategic market positions.

The California power crisis and the collapse of Enron, however, sent shock waves through the market. These events have heightened the burden of proof on companies to demonstrate that they are making the right moves in the complex game of chess that characterises the global electricity market. There has been a pause for breath in 2001 but the momentum of liberalisation combined with capital market demands, technological and environmental pressures and regulatory intervention, means that the process is a long way from checkmate.

An eventual outcome may be a global 'Super-league' of massive players in the power market. But striking a balance between the rush for a wider footprint and maintaining the right business equilibrium is creating boardroom dilemmas. 2001 can be seen as a year of consolidation, particularly as many of the big hitters in Europe, have focused attention on gaining the right critical mass in their home continent. Many European businesses with investments in the Americas and American businesses with investments in Europe have taken a second look at their global expansion strategies; some have pulled back, others have pushed forward. Simultaneously, players from both continents have continued to consolidate domestic positions, both to ensure the right risk profile and mix of activities up and down the value chain and to build an improved, often multi-utility footprint in product and service offerings to customers.

We present in this report an analysis of the cross-border electricity deals in 2001. A full listing of the deals is available at www.pwcglobal.com/powerdeals.

If you would like further information, please contact us.



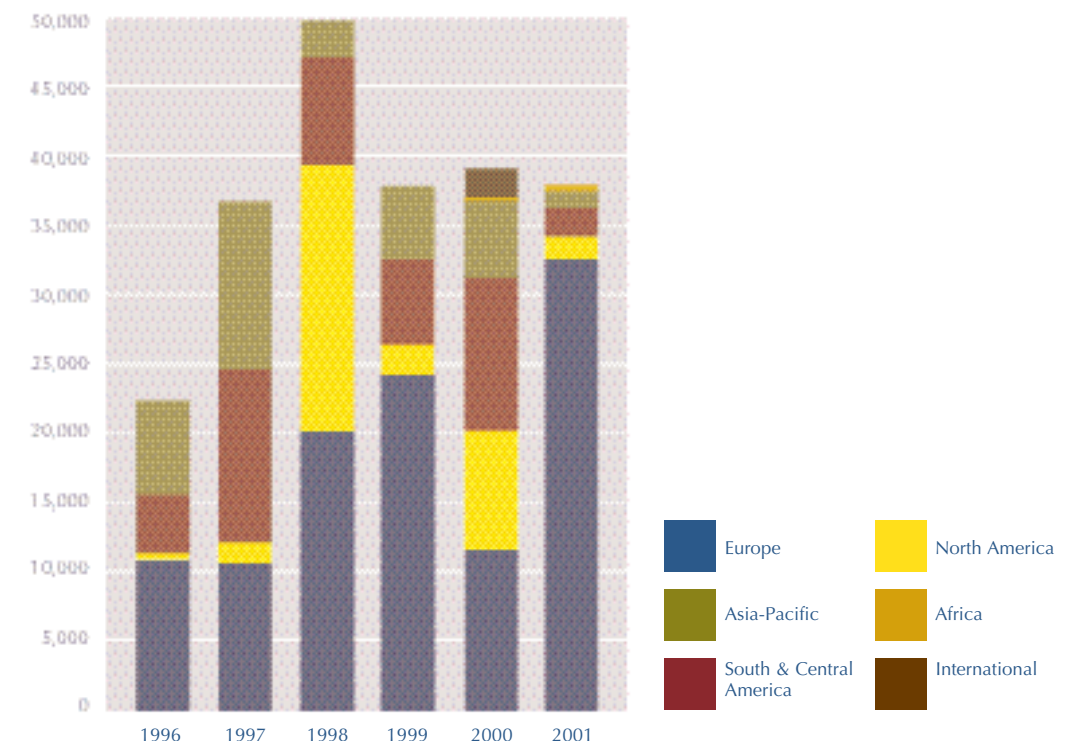
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The scale of cross-border deal activity in 2001 by electricity companies remains immense. Nonetheless, its extent represents a considerable slowdown on 2000 when the number of transactions peaked at 180. However, E.ON AG's US\$13.8bn bid for Powergen pushes the total value of cross-border deals in 2001 close to the US\$38.9bn recorded in 2000. Ironically, Powergen was behind the biggest deal in 2000, a US\$3.2bn move for LG&E Energy in the US, thus highlighting the consolidation that is running through the global electricity sector.

US\$37.8bn worth of deals. 115 different transactions, of which 28 deals whose values were undisclosed. Cross-border deal activity remains vast.

Consolidation is centring on the proven high-value model of constructing a dual fuel, electricity and gas position with customers, backed by generation and production assets. For the moment, consolidation through the development of critical mass in markets appears to be a key priority. As 2001 drew to a close, asset values were falling, especially in generation. The fact that national markets remain overpopulated with companies means that much of the future merger and acquisition (M&A) activity will be fought as hard within domestic frontiers as across borders. However, with falling transaction values and increasing regulatory constraints on domestic expansion, company appetites to achieve growth in virgin territories will return.

Cross-border electricity transactions by target continent (US\$m)



On the global stage

The race to build global presence continued in 2001, but the focus of activity was concentrated heavily on Europe. Seven of the top ten deals were wholly European affairs. Indeed, around 80 per cent of the value of transactions by both bidder and target continent was in Europe, significantly higher than in 2000 when Europe accounted for 29 per cent of the value as a target continent and 54 per cent as a bidder.

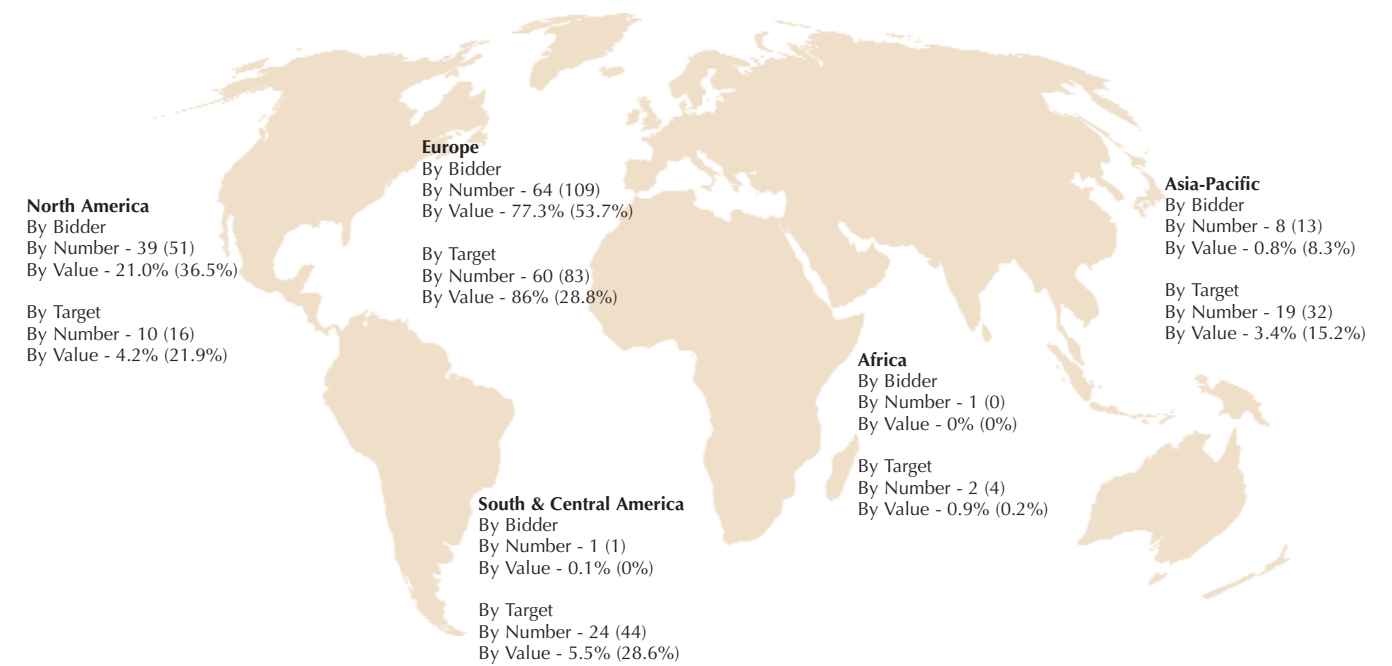
The big challenge for companies, though, will come as they seek to drive through synergies from their hard-won cross-border deals. Will they be able to match their emerging global scale with even harder-won global synergies? Just how far companies will be able to replicate models and success across territories and achieve true synergies across operations remains uncertain. The jury is still out as regards delivering a verdict on how successful the ever-widening international power footprint has been in delivering synergies. The judgement will be crucial in determining the momentum of future cross-border M&A activity.

The impetus of liberalisation and, with it, regulatory moves to require dominant incumbents such as Enel, Endesa and Edf to sell down their market share continued to underpin European deal making in 2001. While the number of deals where a European company was a target fell from a total of 83 to 60, the actual value of bids for European companies nearly trebled under the influence of the E.ON AG/Powergen deal.

Top Ten Deals 2001 (US \$ mil)

No	Value of Transaction (\$ mil)	Date Announced	Target Name	Target Nation	Acquirer Name	Acquirer Nation
1	13,814.94	09 Apr 2001	Powergen Plc	UK	E.ON AG	Germany
2	3,207.25	23 July 2001	Elettrogen SpA	Italy	Endesa	Spain
3	3,054.18	06 Nov 2001	Birka Energi AB	Sweden	Fortum Oyj	Finland
4	2,100.00	18 Oct 2001	Midlands Electricity Plc	UK	Utilicorp United Inc	USA
5	1,963.42	12 Sept 2001	Nueva Viesgo SA	Spain	Enel SpA	Italy
6	1,647.51	03 Dec 2001	Bewag Aktiengesellschaft AG	Germany	Vattenfall	Sweden
7	1,300.00	10 Jan 2001	Sydkraft	Sweden	E.ON Energie AG	Germany
8	960.00	08 Oct 2001	Edison Mission Energy (Fiddler's Ferry/ Ferrybridge)	UK	American Electric Power (AEP)	United States
9	800.00	05 July 2001	Entergy Corp (Saltend Energy Centre)	UK	Calpine Corp	United States
10	745.74	01 Dec 2001	Hidroelectrica del Cantabrico SA	Spain	EdP	Portugal

Cross-border electricity transactions by continent 2001 (2000 figures in brackets)



European deal activity was characterised by European companies divesting generation assets in home countries and purchasing generation elsewhere, with the bigger national players jostling to gain a significant position across the continent. France's Edf, for example, was busy striking deals in the UK, Germany, Belgium, Austria, Poland and Hungary. The German market saw a struggle between Mirant of the US and Vattenfall of Sweden for control of Berlin's municipal power supplier and, longer term, the east German market.

On the investment front, European and North American electricity companies dominate, accounting for US\$29.2bn and US\$7.9bn of bid activity respectively. The year 2001 witnessed a dramatic switch in bids by European countries away from the world stage in favour of expansion and consolidation within Europe. Eighty per cent of total bid activity by European companies in 2001 was in Europe. In contrast, the previous year saw bids by European companies split between targets in Europe (63 per cent of their total activity), US (5 per cent), South and Central America (22 per cent), Asia-Pacific (6 per cent) and Africa (3 per cent).

Given the collapse of share prices in the unregulated energy merchant sector in the US, the fall of transaction values and the stated intent of companies such as E.ON to expand worldwide, one might expect this wider global pattern of bids to reassert itself in 2002. But there are strong capital market pressures to ensure that companies have good strategic explanations for further expansions. 2002 could equally be a year of further small-scale consolidation and depressed cross-border merger and acquisition activity.

Reflecting the 'near-home' focus of European companies and the overall downturn in bid activity, both the number and value of bids for companies in other markets fell significantly in 2001. Bids for North American companies fell from 16 to 10 with their total value as a share of all deals declining from 22 per cent to just 4 per cent, and their average value plummeting from US\$607m to US\$199m. Similar trends emerged in the Asia-Pacific region, and bids for South and Central American companies were also down following a period of intense bidding for South American assets in 2000.

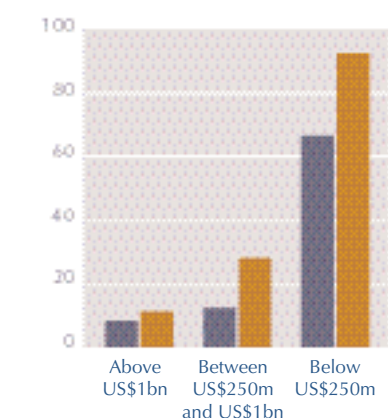
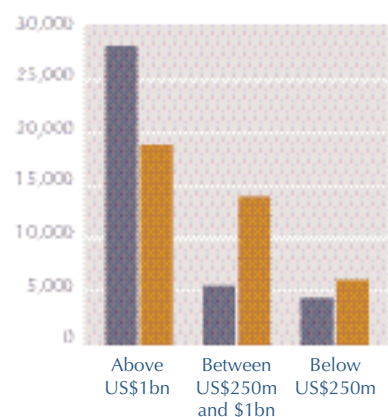
Generating the right mix

In the post-Enron climate, all companies are reviewing their forward trading exposure and many energy trading businesses are reconsidering how 'asset-light' they should be. Even before the collapse of Enron, many companies were reviewing their balance sheets and weighing the mix of owned versus contracted generation in their portfolio. Credit worthiness of contract counterparties will be at the forefront of concerns. During 2000 and 2001, wholesale electricity prices fell in many markets and price volatility gave profit opportunities to many power traders. Boardroom decision-makers will be nervous of any situation that could endanger their credit ratings and adversely affect their ability to trade in the markets for energy.

These factors, combined with specific regulatory requirements to sell generation in Europe, have ensured that generation assets continue to dominate deal volumes. Although the absolute number of generation deals fell from 85 to 64 transactions, their share of total deal volume increased from 47 per cent to 56 per cent.

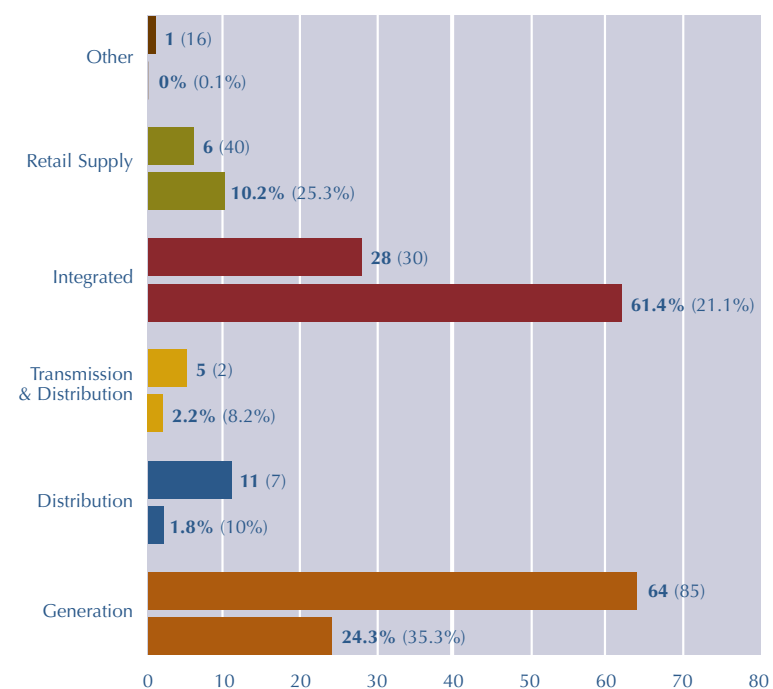
Integrated targets fell in terms of numbers of acquisitions from 30 to 28. However, as a percentage of total value, they rose from 21 per cent to 61 per cent - excluding the E.ON AG deal, a rise to 39 per cent. Two dominant deal profiles have emerged. As market reshaping progresses, larger players are being combined while, at the other end of the spectrum, the level of smaller deals, largely for generation assets, remains significant.

Transactions by bid value 2001



2001 2000

Cross-border electricity transactions by target, 2001 total US\$37.8bn (2000 total US\$38.9bn)



Power Deals in 2001 value of transaction (US \$ mil) in bold

Powergen Plc 13,814.94	Societe Publique d'Electricite - SPE NV-SA 73.4	Tizantuli Aramszolgaltato Rt (Titasz) 5.2
Elettrogen SpA 3,207.25	Luminus NV 73.0	Union Electrica Fenosa SA (Three electricity distributors in Moldova) 5.0
Birka Energi AB 3,054.18	Hidroneuquen 72.5	Miejska Energetyka Ciepna Sp z oo w Koszalinie 3.9
Midlands Electricity Plc 2,100.00	Societe Nationale d'Electricite 70.0	Merchant Energy Group of the Americas 2.0
Nueva Viesgo SA 1,963.42	Oslo Energi AS 66.1	TLP Cogeneration Co 1.8
Bewag Aktiengesellschaft AG 1,647.51	Belize Electricity Co (BECOL) 62.0	Zaklad Energetyki Ciepnej Zlotow 1.3
Sydkraft 1,300.00	Innogy Plc (Fawley power station) 61.8	Elektrociepownia Bedzin S.A. 1.0
Edison Mission Energy (Fiddler's Ferry/ Ferrybridge) 960.00	Gujarat Powergen Energy Corporation Ltd 61.0	Greentech Energy Systems (Wind Park Of Rhodes) 0.6
Entergy Corp (Saltend Energy Centre) 800.00	TrustPower Ltd 57.8	Elektrociepownia Bedzin SA 0.4
Hidroelectrica del Cantabrico SA 745.74	Ukrainian Power Suppliers 55.6	
TransAlta Corp (Electrical transmission business) 562.65	Kainuun Sahko Oy 55.4	
Tractebel SA (European electricity assets) 506.83	Contact Energy Ltd 54.8	Transaction value undisclosed
Contact Energy Ltd 492.94	Elektrownia Rybnik SA 51.4	SEAS Distribution (six gas-fired power plants)
Sociedad Austral de Electricidad (SAESA) 460.0	Eszak-Dunantuli Aramszolgaltato (Edasz) 46.7	Cogeneracion Prat
Public Service Enterprise Group - PSEG (Argentine Assets) 376.0	Kyivoblenergo 45.9	Powergen Plc (East Midlands Electricity Metering Business)
Local Government (Kelvin Power Station) 350.0	Elektrociepownia Bialystok 45.0	Empresa Distribuidora y Comercializadora Norte (EDENOR)
Energie Steiermark Holding AG (ESTAG) 326.6	Power Facilities Pty Ltd 43.5	Gener (Power generation and transmission assets in Argentina)
Curtis Palmer Hydroelectric Company 285.0	Etela-Pohjanmaan Voima Oy 42.8	Empresa Electrica de la Frontera
Westcoast Energy Inc (Two power generating facilities) 255.0	Gener 38.7	Enichem
Central Puerto S.A. 255.0	Oesterreichische Elektrizitaetswirtschafts AG (Verbund) 37.6	Contact Energy Ltd (Whirinaki 54 megawatt gas turbine unit)
Empresa de Electricidad de los Andes SA-Electroandes 246.6	Zhitomiroblenergo 35.0	Shennan Energy (Singapore) Pte Ltd
Energia Global International 236.3	Altek 30.0	Elektrociepownia Tychy SA
Jamaica Public Service Company 200.0	Jaiprakash Hydro Power Ltd 28.8	Empresa de Generacion Electrica Cahua SA, Cementos Norte Pacasmayo SA
Tractebel SA 193.8	Gulf Electric Pcl 27.9	Compania Boliviana de Energia Electrica SA, Compania Electrica Central Bulu Bulu SA, Itiquira Energetica SA
LG Power Co Ltd & LG Energy Co Ltd 190.7	Thai Oil Power Co Ltd 27.4	Budapesti Eromu Rt
Powergen Plc (Mining and power station interests in Hungary and Germany) 186.5	Sociedad Austral de Electricidad SA - SAESA 24.5	Hopewell Cogeneration Limited Partnership
Gavle Energi AB 181.6	Rivneoblenergo 23.2	E.ON Energie AG (hydro power activities)
EdF virtual capacity (6 GW) 162.0	Vattenfall AB (Services Unit) 22.9	Virgin Energy Ltd
Beijing Datang Power Generation 161.1	Agua Negra 22.5	Hsin Yu Energy Development Co Ltd
Light Servicos de Eletricidade SA 151.5	Egenor SA 20.4	Stadtwerke Kapfenberg
Espoon Sahko Oyj 146.0	Iven SA 19.8	Energiefinanzierungs AG
Energie Baden-Wuerttemberg AG (EnBW) 145.0	Trigen Energy Canada Co 18.4	Koszegi Tavhoszolgaltato
Colbun Machicura SA 143.5	Hafslund ASA 16.1	Spark Energy NV
Elektrownia Rybnik 140.0	Delmagyarorszagi Aramszolgaltato Rt - DEMASZ 16.1	Teplarny Brno AS
Sociedade Anonima de Eletrificacao da Paraiba (SAELPA) 110.0	Itiquira Energetica SA 14.7	Termoandes SA
The Cogeneration Public Company Limited (COCO) 87.0	Anhui New Energy Heat & Power Co 14.7	Grupo Generador de Guatemala y Cia SCA
Energieversorgung Gera GmbH, Kraftwerke Gera GmbH 76.9	Komunalne Przedsiębiorstwo Energetyki Ciepnej w Bydgoszczy - (KPEC) 13.0	North American Energy Services
	Empresa de Generacion Electrica Cahua SA 12.3	Hyundai Energy Co Ltd
	Longyan Hengfa Electric Industry Co Ltd 11.5	TroenderEnergi
	Elektrociepownia Zielona Gora SA 10.6	Lusemfa Hydro Power Co.
	FPL Group, Inc. (Fort Fairfield Station, Maine) 10.0	