EU ENERGY LAW AND POLICY ISSUES
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THE ENERGY LAW RESEARCH FORUM

Established in 2007 by Kim Talus (University of Helsinki), Michaël Hunt (Université catholique de Louvain) and Henrik Bjornebye (University of Oslo), the Energy Law Research Forum (ELRF) brings together researchers in energy law from leading European universities. Our objective is to promote the work of energy law and policy researchers as well as to establish a knowledge community through which the latest legal issues in the energy sector can be shared and debated.

Well aware of the importance of knowledge-sharing, the ELRF also welcomes contributions from political scientists, economists or environmentalists. Since these fields of research are inter-related, our understanding of law can only be deepened through the analysis of other fundamental energy-related questions.

To this end, the ELRF is committed to organising meetings and conferences that revolve around Energy Law on a yearly basis. These events enable the Forum’s members to discuss their work and to make known their views to members of industry, academia and governmental bodies.

Finally, the ELRF has decided to engage in the establishment of a book collection related to energy law and policy, offering to its members the opportunity to participate actively in this interesting project. Besides its deep interest in the work of its members, the ELRF is always keen to hear from individuals who have a passion for the subject of energy law.

Hopefully, this endeavour will lead to the creation of a rich research community that will benefit all those with an interest in the legal or political agenda that influences developments in the energy sector.

For more information about the ELRF go to: www.elrf.org.
FOREWORD

Prof Dr Leigh Hancher*

Although no longer one of the younger generation of energy law researchers, I have been privileged to attend a number of conferences organised by ELRF and also to follow closely the academic and professional careers of many of the contributors to the present volume. European energy law is a complex and dynamic area of the law, and demands an in-depth knowledge and understanding of institutional and substantive European law, a good grasp of energy economics as well as a keen eye for policy developments. This present volume confirms that the three editors and the contributing authors are well up to the test.

The publication of this third volume coincides with the deadline for the implementation of the European Union’s ‘Third Package’ of internal electricity and gas market legislation, discussed in detail in this volume. The complexity of this latest package is such that many if not most of the 27 member states have not been able to meet the major deadline of March 2011. Nevertheless, the European Commission is optimistic that implementation should be completed by the end of 2011 and that a true internal energy market will be in full function by 2014. Member states are now engaged in the implementation process and given that the Third Package like its predecessors, favours a ‘menu’ approach to ownership unbundling it will be interesting to take stock in 2014 as to how much uniformity in the organisation of the gas and electricity network sector has emerged out of this process.

In addition to the complexities of the new Third Package, energy lawyers are required to come to grips with the myriad of legal issues which attend the roll-out of the EU’s Climate Change package of legislation as well as the new Gas Security of Supply Regulation and in the near future, new Directives on infrastructure instruments and market transparency and on energy efficiency. Some of these new legislative initiatives are already well advanced, so that the fourth volume in the series can be expected to be confronted with ample material for analysis and critique. Energy lawyers will not only have to come to grips with the complexities of each legislative instrument in its own right but also the potential interaction between the different EU policies and attendant rules. This is something of a

* Leigh Hancher, Professor of European Law, Tilburg University, the Netherlands, and Of Counsel, Allen & Overy, Amsterdam.
Herculean task but one to which the ELRF contributors are likely to grasp with enthusiasm.

Each section of the current, third volume offers the reader a clear analytical guide through the relevant legal developments of the past couple of years, and at both European and international level, but also includes useful and provoking insights into the subject matter at hand. From this perspective the book will be of use not only to practitioners seeking to keep abreast with the latest legal developments but also to legal academics whose own research can equally benefit from a close reading of this third volume in the series and who will hopefully be inspired to join the younger generation for future projects.

BACK TO THE FUTURE?

Looking back on some 30 years of researching and writing as well as advising on European energy law, I am struck by the fact that the existence of a single European market or even a level playing field, remains a novel and perplexing issue for many energy firms. This point is nicely illustrated by a recent controversy in the Netherlands.

Legal and political sparks flew when the Dutch Minister of Economic Affairs granted a subsidy of several billions of euros to a German company Bard, for the construction of two new wind farms in the North Sea, to the dismay of the incumbent Dutch energy companies. They considered the tendering procedure to have been conducted improperly: and according to them, Bard barely has any service record in this field and would not be able to complete the project. The competitors demanded access to the tender documents of the successful applicant. However, neither Bard nor the Minister were keen to release those documents. Litigation had to take place for this issue to be resolved. Criticism of the tender procedure inevitably found its way to the political arena as more than half of the grant was provided under the so called ‘Crisis and Recovery Act’, which specifically aims to boost the Dutch economy in the wake of the financial crisis. Instead of stimulating (Dutch) innovation, a German company was now being incentivised to supply green energy with existing technologies as cheaply as possible. The two major Dutch producers and Bard proposed an interesting way out of these political and legal dogfights. In a joint letter to the Dutch Minister of Economic Affairs, they suggested that it should grant the remaining subsidy budget to the Dutch companies, in which case their appeals lodged against the initial subsidy to Bard would be withdrawn. A cosy solution - which suited all concerned. But this little story also reminds us that energy policy is closely linked to industrial policy, as well as to many other national interests and that neither national government nor national firms will necessarily welcome too much levelling of the famous playing field.
It also illustrates that even after more than 50 years of European integration as a potentially impressive backdrop to the current ‘Europeanisation’ of energy law and policy, in many respects the core legal, political and economic issues that lie at the heart of developing a coherent body of European energy law have, in reality not greatly changed. Even if Article 194 of the Treaty on the Functioning of the European Union now provides a coherent framework for taking European energy policy further, as explained in Section III of this volume, the over-riding demands to be made of that policy and the political if not the legal challenges to be confronted, have not radically altered. European energy policy is still expected to deliver a competitive internal energy market, ensuring affordable and reliable access for Europe’s citizens and businesses to a basic requirement of every day life. Europe has always been dependent on external suppliers and even if sustainability has been something of a later arrival on the policy scene, environmental concerns have always been an essential if sometimes under-rated ingredient of European energy policy. The European nuclear regime has always been a strange patchwork of complex and detailed legislation on certain issues and a gaping ‘black hole’ on other, equally important issues.

Nor, at first sight, are the results of much of this legislative effort particularly impressive in terms of the economics. On the Commission’s own admission, the ‘key deliverables’ of the internal energy market exercise are somewhat meagre. Its annual benchmarking reports are certainly not an occasion for self-congratulation. With some sixty infringement proceedings launched for failure to implement the ‘Second Energy Package’, the Commission already has its hands full in trying to make the internal market a reality.

The latest Commission benchmarking report of 2010 suggests that energy prices have not fallen as a result of liberalisation but as is usual in this type of exercise it also suggests that they would have been higher but for liberalisation.

Wholesale gas and electricity markets play a key role in determining energy costs for households, businesses and in supporting investments in new generation. The Commission believes that only an adequate regulatory framework can deliver the effective oversight and transparency that will make these markets work. With this concern in mind the Commission on 8 December 2010 launched the proposal for a Regulation on energy market integrity and transparency. The new Regulation, adopted in September 2011 develops rules which could prohibit market abuse on wholesale markets in electricity and natural gas and their related products. These rules include clear prohibitions on trading on insider information and market manipulation and are formulated in a consistent way with the Market Abuse

\[1\] COMMISSION STAFF WORKING DOCUMENT 2009-2010 Report on progress in creating the internal gas and electricity market, 9 June 2011.
Directive, and do not apply to financial instruments which are already covered by that Directive.

The more worry findings relate, however, to concentration levels. The 2010 Benchmarking reveals that an analysis of the electricity wholesale market data showed that Bulgaria, France, United Kingdom, Ireland, Poland, Portugal, Slovakia, Spain reported an increase in market concentration as compared to 2008 (as the market share of the three biggest generator by capacity). Happily, ten other countries reported a decrease (Austria, Czech Republic, Germany, Hungary, Italy, Lithuania, Romania, Slovenia, Sweden, Netherlands). The total number of generators with more than 5% ownership by capacity remained stable at 96. Regarding the Herfindahl- Hirschman Index (HHI) only 20 countries reported their figures by capacity. The average index for these 20 countries fell from 4208 in 2008 to 4177 in 2009, which means a small average decline in concentration. Nine countries showed an HHI decrease (Belgium, Germany, Italy, Hungary, Luxembourg; Poland, Romania, Slovenia, Netherlands) seven reported an increase (France, United Kingdom, Latvia, Lithuania, Portugal, Slovakia, Spain) and for two countries the situation was unchanged.

At retail level only five countries registered a change in the number of companies with a market share over 5% in the retail market and in only seven countries the concentration rate showed a small decrease. The picture was hardly better for the gas retail market.

On the gas wholesale market the HHI’s decrease showed in 2009 for most of the countries that submitted data, may be ascribed to the increased share of short–term as volumes in total supply on the EU wholesale market. However the concentration remains high. Out of the 21 countries who submitted data only United Kingdom has a concentration ratio for the 3 biggest wholesale companies less than 40%; a couple of countries have almost 70% (Spain, Germany) and the rest of the countries are very close to or above 90%.

These statistics do not provide much reassurance that cut-throat competition the internal electricity and gas markets is just around the corner.

**NEW DIMENSIONS**

At the same time, one could contend that with the adoption of the Third Package, a great deal has changed – or should change in the longer term. The Union has now equipped itself with a battery of legislation to pursue its energy policy goals – to truly pursue the ‘Europeanization’ of energy policy, as the present Commissioner would claim. It has also succeeded in creating new institutions – national regulatory authorities with enhanced powers as well as a new Agency of
Co-operation of European Energy Regulators and the European Transmission System Operators organisations. These bodies in turn have been furnished with the daunting task of developing new instruments, including framework guidelines and network codes. Their work will undoubtedly raise novel legal issues and this current volume provides one of the first systematic analyses of the new legal framework for delegated legislation and offers a useful set of insight into future developments in this crucial area of European law.

In the meantime, the Commission has also extended the reach of European competition law to secure considerable concessions in the form of settlements from large European players. In doing so it has pushed the bounds of Article 102 to cover, at least potentially, various forms of conduct, including withholding of capacity, which would have been unthinkable only a few years ago. Again the current volume, in its section II provides the reader with extensive and comprehensive, as well as critical insights into these developments. At the same time novel legal questions continue to arise in relation to the interface between EU legislative measures and competition principles. How much co-operation between undertakings such as transmission system operators can be permitted within the long shadow of Article 101(1) TFEU? And what types of long term contracts or take-or-pay contracts remain permissible? Should long term contracts for renewables receive more favourable treatment? How far do or should security of supply type justifications be taken into account? And to what extent should institutions such as gas-buyers’ groups or consortia be welcomed and on what basis? Would a consortium of gas purchasers facilitate competition or is it enough that this type of institution would improve the EU’s bargaining power with foreign producers, thus enhancing security of supply? Sections II and IV provides the reader with a good analytical framework for understanding not only the past of European energy policy but also its complex future. Competition issues are unlikely to be any less problematic in green energy markets than as they have proved to be in ‘grey’ markets.

Security of supply has traditionally been something of the poor relation at the EU policy table. Greater political and indeed legislative effort has been focussed on the internal market and climate change. Again however this picture is changing rapidly The new Gas Security of Supply (SOS) Regulation is widely acknowledged as an innovative if not necessarily flawless approach to balancing the competing interests of the Union and national governments. In addition is now becoming quickly apparent that the Commission is anxious to enjoy its newly acquired powers in the area of foreign direct investment. Its new Communication on “Security of Supply and International Co-operation, the EU Energy Policy, Engaging with partners Beyond our Borders”, adopted on 7 September, proposes a more co-ordinated and united external energy strategy. In addition, the Commission proposes to adopt a Decision setting up an information exchange mechanism for intergovernmental agreements in the field of energy between Member States and third countries. It will extend and...
complement the notification procedure already applicable to gas agreements in the SOS Regulation to all forms of energy. The language of the press release is interesting – with its emphasis on co-ordination and transparency the reader may be forgiven for thinking that this latest initiative is unlikely to be of any real consequence. This would be to underestimate the new powers of the Commission potentially to insist on changes to host government agreements or other bilateral investment treaties if these do not conform to European energy law principles. Section III deals with this dimension of European energy policy. A noteworthy and indeed exemplary aspect of the present volume is that it examines the issues from a number of perspectives and is certainly not ‘ euro-centric’ in its approach.

CROSS-BORDER ISSUES

Perhaps one of the most important developments that will gradually emerge from the new institutional apparatus created by the Third Package is the powers now given to the Commission, to NRAs and to the ACER to tackle cross-border issues. The paradox of the First and Second Packages was that they focussed on harmonising national energy market regulation while leaving the crucial issue of cross-border trade, and more importantly cross-border infrastructure almost entirely out of the picture. Indeed the exemption procedures for new, cross border infrastructure projects as provided in the second Gas Directive and the first Electricity Regulation have proved to be almost the only way to ‘regulate’ interconnection between the Member States. The Commission used its powers to approve national exemption decisions to impose conditions on the grant of the exemption. Now that the Third Package provides for greater co-ordination between the NRAs, and a default role for the ACER, to approve special regimes for cross border infrastructure it may well be that paradoxically, national firms will push for a ‘regulatory solution’ to deal with specific projects within the boundaries of the relevant national regimes. At the same time the various harmonized framework codes and network codes should facilitate regulatory convergence across national borders. Again, time will tell.

A crucial factor in this particular area will of course be how the massive investment needed to meet the realisation of a true European market which is both competitive and sustainable, as well as secure, is to be paid for. While some Member States have kept their TSOs under state control or others have nationalised their high voltage/high pressure network companies, others are now looking to privatise these assets to reduce national debt burdens. The investment challenge may well be uniform across the 27 Member States but the manner in which it is to be met is likely to be richly divergent, and this is in and of itself a regulatory challenge.
FROM DECENTRALISED MARKETS TO RE-REGULATION AND CENTRALISATION

It is perhaps too early to draw up firm conclusions on the impact of the Third Package and the related legislative initiatives launched and adopted or still under negotiation, but the overall impression that this volume with its multi-faceted perspectives on European as well as international energy law leaves on the reader is surely that there is has been a major shift towards regulation and centralisation with the European Commission as ring master. The Commission is not only in the driving seat when it comes to promoting new initiatives but it has increased its grip over the implementation and enforcement of the resulting legal framework. NRAs are to become less dependent on their national governments and, within the framework of ACER, decentralised European regulators, keeping careful watch on national implementation. The increasing reliance on regulations as opposed to directives effectively sidelines national governments. Delegated legislation can be adopted with relative ease to expand rapidly the new framework without significant national governmental input. Regulators are supposed to bite as well as bark and they should be equipped with tougher sanctioning powers as well as powers to investigate and perhaps even inspect energy firms.

The Third Package unleashes a veritable plethora of plans, roadmaps and other ‘soft law’ instruments that are European-wide in their ambitions and in their impact. Nor should one overlook the increased reporting burdens on energy firms who are obliged to hand over a significant amount of confidential data, agreements, future investment plans etc to the NRAs and/or the Commission. This flow of information is the very grist for the European and national planning mills.

Finally for a faithful European energy law observer who has spent several decades honing her skills, I can only express my astonishment as to how quickly the Commission has pushed its recent legislation through. The new REMIT rules have been adopted in less than a year. Compare that to the ten years it took the Commission to persuade the Member States to adopt the first tentative step to market liberalisation that was the adoption and subsequent of implementation of the first electricity and gas directives in 1998 (electricity) and 2000 (gas).

CONCLUSION

The most fitting conclusion on the impact of some three decades of European energy market regulation discussed in this brief foreword is the Commission’s own, to its last benchmarking report. It is worth citing it at length.

“There are signs which demonstrate the emergence of European energy wholesale markets such as: convergence of prices, decrease in gas prices for Member State

Intersentia
that have diversified supply, better cooperation among power exchanges and TSOs. Nevertheless the situation remains to be improved and significant obstacles to open integrated and competitive markets in electricity and gas remain. Interconnection capacity between Member States remains generally insufficient and bottlenecks exist which prevent fluid transmission of energy within and between countries. Even if interconnections exist, the absence of harmonisation of market rules in the different Member States leads to market segmentation and higher transaction costs which constitutes a barrier in particular for smaller player. This can even lead to the inefficient situation where gas and electricity flow from high-price areas to low-price areas.

At retail level, the integration of the European electricity and gas markets has not developed sufficiently yet. European gas and electricity retail markets are still characterised by substantial disparities in the different Member States as far as price levels and switching rates are concerned. Decreasing wholesale prices in electricity and gas have not always been passed on to retail consumers. In gas, most households and industrial consumers were able to benefit from a significant decrease of their gas bills, but in electricity, retail prices rose in most of the countries. Moreover electricity and gas retail markets remained highly concentrated with little evidence of new entry of independent suppliers.

In view thereof, the Commission services intend to focus on:

- the implementation of the third energy package
- the development of the gas and electricity internal market, including networks
- the harmonisation of the design of the market and
- the improvement of the functioning of retail markets”.

These remarks provide me with the opportunity to reflect – as one of the ‘not-so-young European energy lawyers group’ – that those who wish to be engaged with European energy law and policy – as practitioners or as academics, or a combination of the two, need to emulate the Commission and stay optimistic.

We lawyers have every reason to be optimistic. For every problem and obstacle on the long and winding road to market integration there is always one tried and trusted solution. More laws! There will be plenty of material to keep many future generations of young and not so young energy lawyers fully occupied in the coming decades.
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## ABBREVIATIONS

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<tbody>
<tr>
<td>ABA</td>
<td>American Bar Association’s Section of Environment, Energy and Resources</td>
</tr>
<tr>
<td>ACER</td>
<td>Agency for the Cooperation of Energy Regulators</td>
</tr>
<tr>
<td>ACES</td>
<td>American Clean Energy and Security Act</td>
</tr>
<tr>
<td>ACORE</td>
<td>American Council On Renewable Energy</td>
</tr>
<tr>
<td>ATS</td>
<td>Administrator of the Trading System</td>
</tr>
<tr>
<td>BAT</td>
<td>Best Available Technique</td>
</tr>
<tr>
<td>BCOs</td>
<td>Building Control Officers</td>
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<tr>
<td>BIT</td>
<td>Bilateral Investment Treaty</td>
</tr>
<tr>
<td>BRT</td>
<td>Bus Rapid Transit</td>
</tr>
<tr>
<td>BTS</td>
<td>Baltic Pipeline System</td>
</tr>
<tr>
<td>CAC</td>
<td>Central Asian Center</td>
</tr>
<tr>
<td>CAO</td>
<td>Coordination Auction Office</td>
</tr>
<tr>
<td>CBM</td>
<td>Coal Bed Methane</td>
</tr>
<tr>
<td>CCS</td>
<td>Carbon Capture &amp; Storage</td>
</tr>
<tr>
<td>CCSP</td>
<td>Climate Change Science Program</td>
</tr>
<tr>
<td>CCTP</td>
<td>Climate Change Technology Program</td>
</tr>
<tr>
<td>CDM</td>
<td>Clean Development Mechanism</td>
</tr>
<tr>
<td>CDM EB</td>
<td>CDM Executive Board</td>
</tr>
<tr>
<td>CEER</td>
<td>The Council of European Energy Regulators</td>
</tr>
<tr>
<td>CEN</td>
<td>European Committee for Standardization</td>
</tr>
<tr>
<td>CERs</td>
<td>Certified Emission Reductions</td>
</tr>
<tr>
<td>CEGH</td>
<td>Central European Gas Hub</td>
</tr>
<tr>
<td>CFI</td>
<td>Court of First Instance</td>
</tr>
<tr>
<td>CFSP</td>
<td>Common Foreign and Security Policy</td>
</tr>
<tr>
<td>CHP</td>
<td>Combined Heat and Power</td>
</tr>
<tr>
<td>CLG</td>
<td>Department of Communities and Local Government</td>
</tr>
<tr>
<td>DEAs</td>
<td>Domestic Energy Assessors</td>
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<tr>
<td>DNAs</td>
<td>Designed National Authorities</td>
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<tr>
<td>DSO</td>
<td>Distribution System Operator</td>
</tr>
<tr>
<td>EBRD</td>
<td>European Bank for Reconstruction and Development</td>
</tr>
<tr>
<td>ECBR</td>
<td>Energy Community Regulatory Board</td>
</tr>
<tr>
<td>ECHR</td>
<td>European Convention on Human Rights &amp; Fundamental Freedoms</td>
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<tr>
<td>ECI</td>
<td>European Critical Infrastructure</td>
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<tr>
<td>ECJ</td>
<td>European Court of Justice</td>
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Abbreviations

ECS  Energy Community Secretariat
ECSC  European Coal and Steel Community
ECT  Energy Charter Treaty
ECHR  European Court of Human Rights
EETI  European Energy Transparency Initiative
EEU  Effective and Efficient Unbundling
EFET  European Federation of Energy Traders
EIA  Environmental Impact Assessment
EIB  European Investment Bank
EIGSS  European Integrated Gas Supplying System
EITI  Extractive Industry Transparency Initiative
EMA  Environmental Market Association
EN  European Norm
EnCT  Energy Community Treaty
ENP  European Neighbourhood Policy
ENTSO-E  Network of Transmission System Operators for Electricity
ENTSO-G  Network of Transmission System Operators for Gas
EPA  Environmental Protection Agency
EPCs  Energy Performance Certificates
ERGEG  The European Regulators Group for Electricity & Gas
ESCOs  Energy Service Companies
ESD  Energy Services Directorate
ETNNA  Environmental Tracking Network of America
ETS  Emission Trading Scheme
EURATOM  European Atomic Energy Community
EWM  Early Warning Mechanism
FEC  Federal Energy Commission
FITs  Feed-In Tariffs
FRECS  Federal Renewable Electricity Credits
FTA  Free Trade Agreement
GATT  General Agreement of Tariffs and Trade
GEF  Global Environment Fund
GGPSSO  Guidelines for Good Third Party Access Practice for Storage System
GHG  Greenhouse Gas
GIS  Generation Investment Study
GPP  Green Power Partnership
GSP  Generalised System of Preferences
GVR  Guidelines on Vertical Restraints
HRA  Human Rights Act
ICC  International Code Council
IEA  International Energy Agency
<table>
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<tr>
<td>IET</td>
<td>International Emissions Trading</td>
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<tr>
<td>IFIs</td>
<td>European Industrial Federations</td>
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<tr>
<td>IMO</td>
<td>International Maritime Organisation</td>
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<tr>
<td>IP</td>
<td>Intellectual Property</td>
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<tr>
<td>IPCC</td>
<td>International Panel on Climate Change</td>
</tr>
<tr>
<td>IPS</td>
<td>Interconnected Power System</td>
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<tr>
<td>IS</td>
<td>Innovation System</td>
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<td>ISO</td>
<td>Independent System Operator</td>
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<tr>
<td>ITC</td>
<td>Inter-TSO Compensation Mechanism</td>
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<tr>
<td>ITO</td>
<td>Independent Transmission Operator</td>
</tr>
<tr>
<td>ICERS</td>
<td>Long-Term Certified Emission Reductions</td>
</tr>
<tr>
<td>LDCs</td>
<td>Least Developed Countries</td>
</tr>
<tr>
<td>LEED</td>
<td>Leadership in Energy and Environmental Design</td>
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<tr>
<td>LNG</td>
<td>Liquefied Natural Gas</td>
</tr>
<tr>
<td>LUCLUUF</td>
<td>Land-Use, Land-Use Change and Forestry</td>
</tr>
<tr>
<td>MNF</td>
<td>Most Favoured Nation</td>
</tr>
<tr>
<td>MRV</td>
<td>Measurable, Reportable and Verifiable</td>
</tr>
<tr>
<td>NAFTA</td>
<td>North American Free Trade Agreement</td>
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<tr>
<td>NAPs</td>
<td>National Allocation Plans</td>
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<tr>
<td>NBP</td>
<td>National Balancing Point</td>
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<tr>
<td>NEEAP</td>
<td>National Energy Efficiency Action Plan</td>
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<tr>
<td>NFFO</td>
<td>Non-Fossil Fuel Obligation</td>
</tr>
<tr>
<td>NIB</td>
<td>Nordic Investment Bank</td>
</tr>
<tr>
<td>NRA</td>
<td>National Regulatory Authorities</td>
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<tr>
<td>NTPA</td>
<td>Negotiated Third Party Access</td>
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<tr>
<td>OECD</td>
<td>Organisation for Economic Cooperation &amp; Development</td>
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<tr>
<td>OICC</td>
<td>Office for Innovation and Climate Change</td>
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<tr>
<td>OU</td>
<td>Ownership Unbundling</td>
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<tr>
<td>OSCE</td>
<td>Organisation for Security and Co-Operation in Europe</td>
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<tr>
<td>OTC</td>
<td>Over-The-Counter</td>
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<tr>
<td>QFs</td>
<td>Qualified Facilities</td>
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<tr>
<td>PCA</td>
<td>Partnership and Cooperation Agreement</td>
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<tr>
<td>PDD</td>
<td>Project Design Documents</td>
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<tr>
<td>PEG’s</td>
<td>Point d’Echange de Gaz</td>
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<tr>
<td>PHLG</td>
<td>Permanent High Level Group</td>
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<tr>
<td>PJM/GATS</td>
<td>Pennsylvania, New Jersey and Maryland Generation Attribute Tracking System</td>
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<tr>
<td>PPA</td>
<td>Power Purchasing Agreements</td>
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<td>PPC</td>
<td>Permanent Partnership Council</td>
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<td>PPTP</td>
<td>Power Plant Technology Platform</td>
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<td>PSO</td>
<td>Public Service Obligations</td>
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<tr>
<td>PUCT</td>
<td>Public Utility Commission of Texas</td>
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<tr>
<td>PURPA</td>
<td>Public Utility Regulatory Policies Act</td>
</tr>
</tbody>
</table>
Abbreviations

RAO UES Russian Joint Stock Company of Electricity and Electrification
REIO Regional Economic Integration Organization
RO Renewables Obligation
RPS Renewables Portfolio Standard
RTO Regional Transmission Organisations
RTPA Regulated Third Party Access
SDM Standard Market Design
SEA Strategic Environmental Assessment
SET-PLAN Strategic Energy Technology
tCERS Temporary Certified Emission Reductions
TEN-E Trans-European Energy Networks
TENS Trans European Networks
TEU Treaty on European Union
TP Transit Protocol
TPA Third Party Access
TSO Transmission System Operator
TTF Title Transfer Facility
UCTE The Union for the Coordination of Transmission of Electricity
UGS Underground Gas Storage
UNFCCC United Nations Framework Convention on Climate Change
UIOLI Use-it-or-lose-it Mechanisms
VBER Vertical Block Exemption Regulation
VCLT Vienna Convention on the Law of Treaties
VPP Virtual Power Plants
WTO World Trade Organisation