

PRATT'S

ENERGY LAW

REPORT



EDITOR'S NOTE: ENERGY ISSUES AROUND THE WORLD

Victoria Prussen Snears

EPA'S CLEAN WATER ACT CERTIFICATION PROPOSAL TO SIGNIFICANTLY IMPACT HYDROPOWER LICENSING

Chuck Sensiba, Andrea Wortzel, Anna Wildeman and Morgan Gerard

FERC PROPOSES OVERHAUL OF GENERATOR INTERCONNECTION PROCESS TO ADDRESS QUEUE BACKLOGS

Adam Wenner A Cory Lankford and Kayla Gran

FTC CHALLENGE IN ENERGY TRANSACTION SIGNALS HEIGHTENED SCRUTINY OF M&A AGREEMENT NONCOMPETE PROVISIONS

Steve Albertson, Thomas Ensign, Mark Ostrau and Elizabeth Suarez

MULTI-CONTRACT HYDROGEN PROJECTS: AVOIDING INTERFACE RISKS AND LEAKS

Craig Bruce, Jon Thursby, Adam Smith, Lucy Preston and Alexander A. Witt

INTERNATIONAL ENERGY AGENCY REPORT HIGHLIGHTS NUCLEAR AS CRITICAL TO CLEAN AND SECURE ENERGY TRANSITION

Amy C. Roma and Stephanie Fishman

EUROPEAN UNION ADOPTS NEW RULES FOR TRANS-EUROPEAN NETWORKS FOR ENERGY Johan Ysewyn and Carole Maczkovics

UPCOMING EUROPEAN UNION REMOVABILITY AND REPLACEABILITY REQUIREMENTS ON PORTABLE BATTERIES

Cándido García Molyneux and Lucas Falco

Pratt's Energy Law Report

VOLUME 22	NUMBER 10	November-Decemb	November-December 2022	
Editor's Note: Energy Victoria Prussen Spears	Issues Around the World	i	349	
EPA's Clean Water Act	t Certification Proposal 1	o Significantly		
Impact Hydropower I	-		351	
FERC Proposes Overh to Address Queue Bac	naul of Generator Interco	onnection Process		
	y Lankford and Kayla Gra	nt	357	
Scrutiny of M&A Agr Steve Albertson, Thoma	ergy Transaction Signals eement Noncompete Pro as Ensign, Mark Ostrau a egen Projects: Avoiding I	visions nd Elizabeth Suarez	363	
	sby, Adam Smith, Lucy Pr	eston and	367	
	Agency Report Highlight Secure Energy Transition phanie Fishman		374	
Networks for Energy	ots New Rules for Trans-	European	270	
Johan Ysewyn and Car	OIC IVIACZKOVICS		379	
Upcoming European Requirements on Port	Union Removability and able Batteries	Replaceability		
Cándido García Molyn			383	



QUESTIONS ABOUT THIS PUBLICATION?

For questions about the Editorial Content appearing in these volumes or reprint peplease email:	
Jessica Carnevale, Esq. at	
Email: jessica.carnevale@lexist	nexis.com
Outside the United States and Canada, please call (973) 8	320-2000
For assistance with replacement pages, shipments, billing or other customer service please call:	matters,
Customer Services Department at	33-9844
Outside the United States and Canada, please call (518)	í87-3385
Fax Number	328-8341
Customer Service Website http://www.lexisnexis.com	custserv/
For information on other Matthew Bender publications, please call	
Your account manager or (800) 2	223-1940
Outside the United States and Canada, please call (937)	247-0293

ISBN: 978-1-6328-0836-3 (print) ISBN: 978-1-6328-0837-0 (ebook) ISSN: 2374-3395 (print)

ISSN: 2374-3409 (online)

Cite this publication as:

[author name], [article title], [vol. no.] PRATT'S ENERGY LAW REPORT [page number] (LexisNexis A.S. Pratt);

Ian Coles, Rare Earth Elements: Deep Sea Mining and the Law of the Sea, 14 Pratt's Energy Law Report 4 (LexisNexis A.S. Pratt)

This publication is designed to provide authoritative information in regard to the subject matter covered. It is sold with the understanding that the publisher is not engaged in rendering legal, accounting, or other professional services. If legal advice or other expert assistance is required, the services of a competent professional should be sought.

LexisNexis and the Knowledge Burst logo are registered trademarks of RELX Inc. Matthew Bender, the Matthew Bender Flame Design, and A.S. Pratt are registered trademarks of Matthew Bender Properties Inc. Copyright © 2022 Matthew Bender & Company, Inc., a member of LexisNexis. All Rights Reserved.

No copyright is claimed by LexisNexis or Matthew Bender & Company, Inc., in the text of statutes, regulations, and excerpts from court opinions quoted within this work. Permission to copy material may be licensed for a fee from the Copyright Clearance Center, 222 Rosewood Drive, Danvers, Mass. 01923, telephone (978) 750-8400.

Editorial Office 230 Park Ave., 7th Floor, New York, NY 10169 (800) 543-6862 www.lexisnexis.com

MATTHEW & BENDER

Editor-in-Chief, Editor & Board of Editors

EDITOR-IN-CHIEF

STEVEN A. MEYEROWITZ

President, Meyerowitz Communications Inc.

EDITOR

VICTORIA PRUSSEN SPEARS

Senior Vice President, Meyerowitz Communications Inc.

BOARD OF EDITORS

Samuel B. Boxerman

Partner, Sidley Austin LLP

ANDREW CALDER

Partner, Kirkland & Ellis LLP

M. SETH GINTHER

Partner, Hirschler Fleischer, P.C.

STEPHEN J. HUMES

Partner, Holland & Knight LLP

R. Todd Johnson

Partner, Jones Day

BARCLAY NICHOLSON

Partner, Norton Rose Fulbright

ELAINE M. WALSH

Partner, Baker Botts L.L.P.

SEAN T. WHEELER

Partner, Kirkland & Ellis LLP

Hydraulic Fracturing Developments

ERIC ROTHENBERG

Partner, O'Melveny & Myers LLP

Pratt's Energy Law Report is published 10 times a year by Matthew Bender & Company, Inc. Copyright © 2022 Matthew Bender & Company, Inc., a member of LexisNexis. All Rights Reserved. No part of this journal may be reproduced in any form—by microfilm, xerography, or otherwise—or incorporated into any information retrieval system without the written permission of the copyright owner. For customer support, please contact LexisNexis Matthew Bender, 9443 Springboro Pike, Miamisburg, OH 45342 or call Customer Support at 1-800-833-9844. Direct any editorial inquiries and send any material for publication to Steven A. Meyerowitz, Editor-in-Chief, Meyerowitz Communications Inc., 26910 Grand Central Parkway Suite 18R, Floral Park, New York 11005, smeyerowitz@meyerowitzcommunications.com, 631.291.5541. Material for publication is welcomed—articles, decisions, or other items of interest to lawyers and law firms, in-house counsel, government lawyers, senior business executives, and anyone interested in privacy and cybersecurity related issues and legal developments. This publication is designed to be accurate and authoritative, but neither the publisher nor the authors are rendering legal, accounting, or other professional services in this publication. If legal or other expert advice is desired, retain the services of an appropriate professional. The articles and columns reflect only the present considerations and views of the authors and do not necessarily reflect those of the firms or organizations with which they are affiliated, any of the former or present clients of the authors or their firms or organizations, or the editors or publisher.

POSTMASTER: Send address changes to *Pratt's Energy Law Report*, LexisNexis Matthew Bender, 230 Park Ave. 7th Floor, New York NY 10169.

Multi-Contract Hydrogen Projects: Avoiding Interface Risks and Leaks

By Craig Bruce, Jon Thursby, Adam Smith, Lucy Preston and Alexander A. Witt*

In this article, the authors consider the structures that developers and lenders may expect to see on green (or blue) hydrogen projects and whether any lessons can be learned from other (more mature) technologies.

The energy transition and climate crisis continue to be a hot topic in political and economic circles. Current global events only serve to demonstrate the need for nations to diversify their sources of energy. While nuclear and traditional renewable power such as solar and onshore/offshore wind will play an important role in nations achieving their net zero goals, the energy market is also exploring new technologies such as floating wind and green hydrogen.

Although these new technologies are still developing, it is clear that the opportunities they offer market participants are significant. Floating wind projects will have the benefit of developing within a pre-existing market of offshore wind where developers and contractors are both familiar with the general technology, how to construct the project and associated contract structures. Green hydrogen project developers will however need to forge their own path and consider how best to structure project development.

This article considers what structures developers and lenders may expect to see on green (or blue) hydrogen projects and whether any lessons can be learned from other (more mature) technologies.

CONTRACT AND STRUCTURE FORM

Large scale and complex energy projects are often procured using an amended version of the FIDIC "Yellow Book," which is a standard form of construction agreement. One would not expect that approach to differ on a hydrogen project given that a FIDIC structure offers the flexibility needed to

^{*} Craig Bruce, a senior associate in the London office of Orrick Herrington & Sutcliffe LLP, advises on all aspects of the construction and operation of energy projects with a particular focus on renewable energy. Jon Thursby, a partner in the firm's office in Singapore, advises on all aspects of the construction and operation of offshore wind and other large renewable energy projects in established and developing markets. Adam Smith, a partner in the firm's London office, is a project development and finance lawyer in the energy, infrastructure and natural resources sectors. Lucy Preston and Alexander A. Witt are managing associates in the firm's London office. The authors may be contacted at cbruce@orrick.com, jthursby@orrick.com, adam.smith@orrick.com, lpreston@orrick.com and awitt@orrick.com, respectively.

easily reflect the commercial/technical needs of the technology and is familiar to lenders operating within the energy market (it is easily amendable to be in a bankable form).

Developers must then decide whether to pursue an EPC¹ wrap or multicontract structure. In truth, no large-scale energy project is likely to be developed on a true turnkey EPC basis (i.e., where one contractor delivers the whole project under a single contract). The cost to the developer of that approach is likely to be prohibitively expensive given the premium that a contractor would attach to the offering to reflect the level of risk assumed by it (a risk which is unlikely to be commercially attractive to any contractor on the market).

Large infrastructure projects can be delivered on a limited multi-contract basis, where an EPC wrap is applied across various packages of work which results in a project being developed with 3 or 4 EPCs covering the major components. For example, in the offshore wind market, contracts may cover civils, electrical and turbine work.

Alternatively, they can be delivered on a true multi-contract basis where developers enter into tens of contracts splitting out structures into their component parts. For example, on offshore wind and nuclear projects developers may seek supply and installation agreements from each original equipment manufacturer of key components resulting in many contracts being procured for the overall project.

As the hydrogen market evolves we may see that some contractors are willing to wrap more packages into subcontracts as the risk of any technology included in those packages becomes more known and/or quantifiable.

COMMERCIAL CONSIDERATIONS

The developer will need to consider the development as a whole when determining the contracting strategy including considering technical, commercial and financing considerations. Common commercial considerations may include:

• Price—generally, the fewer contracts a developer enters into (on a complex infrastructure project) the more subcontracts the head contractor will need to wrap. This pushes the interface risk (both in the sense of package management and liability) from the developer onto the contractor who will in turn attach a greater premium to the overall contract price to account for such risk.

¹ An EPC contract refers to an engineering, procurement, and construction contract.

- Management Capability—if the developer enters into a larger number of
 contracts, it will need the resources and expertise to manage, on a
 day-to-day basis a large number of contractors.
- Debt/Equity Funding—traditionally, lenders were nervous of multi-contracting structures. However, multi-contracting, and the risks associated with multi-contracting, are now well understood and, provided that the developer and its advisors can guide the lenders through the structure and explain (as clearly as possible) the rationale for the chosen strategy and the relevant mitigants, lenders can and do get comfortable with funding a development constructed on a multi-contract structure.
- Contractor Experience—in new technologies where contractors may yet to have demonstrable market experience it may be preferable to limit the number of contracts and/or ask those larger, more experienced contractors to wrap packages of work. This offers the developer more protection from non-performance and insolvency risk of smaller entities. It may also have the benefit of involving known names in the project who may be large international contractors that are diversifying their business which can provide some comfort as to technical capabilities on key packages to sponsors and any debt providers. On the other hand, it is likely that such contractors will be less willing to negotiate on cost and may impose more onerous terms, knowing there is no reliable alternative for a developer. Although, it may be better to agree lighter contractual protections with an experienced contractor than more robust protections with an inexperienced contractor who may be unlikely to perform.
- *Insurance*—as with any new technology, insurance will be an important factor. However, as the insurance market continues to harden, contractors and developers will perhaps have to bear more risk than they have in the past where insurance providers are unwilling to step-in or the insurance premiums are too high to reflect the commercial requirements of the specific project.

LEGAL CONSIDERATIONS

Notwithstanding the commercial implications of the level of multicontracting deployed on a project, all construction contracts should look to mitigate the interface risk inherent in such a structure.

Common pitfalls that parties may come across in a multi-contracting structure and how the legal terms can protect their interests are discussed below. These are all issues that can all be mitigated with the correct drafting.

- Consistency of Terms—perhaps the simplest mitigant available to parties is to ensure that (wherever possible) the key terms of the contracts are aligned across the packages. In particular, attention should be paid to those terms relating to program delivery, co-ordination and co-operation between contractors, information sharing, indemnities, Variations, force majeure, delay, governing law and dispute resolution. Commonality across contracts will ensure ease of delivery and operation by the developer on a practical basis as it can be sure that the project is working on a common base line. Consequently, if/when an issue arises contracts should respond in a similar manner rather than one contractor being treated out of step to the others.
- Coordination—it is vital in the management of interface risk to ensure that contractors are facilitating the different packages (both in allowing personnel access to the site to work and in providing for any contingent works in the relevant programs). Base FIDIC includes a co-operation provision,² although the developer may wish to make amendments to provide for a more detailed interface mechanism between the contractors. Contractors should also be required to review and comment on other contractor designs that interface with or are relevant to their works to ensure technical and design interfaces align.

Key considerations that developers may wish to address include:

- O Price Certainty—as drafted, the contractor may be entitled to a Variation for any instructions issued as a result of co-operation with third parties. Developers may wish to consider whether such actions should be wrapped as part of the Contract Price and/or build in known interface requirements (e.g., attendance at regular project meetings or a dialogue with the project manager). Contractors are increasingly trying to limit their obligations to what is considered "reasonable," which is vague and may open up discussions as to whether the contractor is entitled to relief or not. It is therefore vital to ensure that wherever possible, the drafting is as clear and unambiguous as possible. In addition, as discussed below, issues with supply chain or changes in regulations may mean additional contingencies need to be built in to price considerations.
- Operational Requirements—as mentioned above, expressly specifying any known or anticipated operational requirements as part

² See Sub-Clause 4.6 [Co-operation] of the Yellow/Silver Book, 1999 form).

of the co-operation provisions across packages will also help to facilitate a smooth delivery of the project program. To the extent that the developer requires information sharing between contractors in relation to contingent works, attendance at meetings or specific access requirements that may be key to the wider program, etc. these could be factored into the drafting and therefore into the program and price before any variation becomes available.

- Interface Matrix—many developers will create an interface matrix or division of responsibility which (from a technical capacity) clarifies what obligations sit with each contractor across the project. It may be helpful to append this document to the contract as an aid to explaining the obligations of the parties in relation to the interface points and/or scope of work. However, to the extent such a document is attached to the contract, it will be vital to ensure that it is sufficiently detailed and complete as to aid clarity rather than create ambiguity within the contract which can lead to greater uncertainty and disputes between the parties.
- Employer's Requirements—in addition to clarify the legal interfaces it will be important from a technical perspective for the scope of work of each package to be accurately defined in the technical documents to ensure that there are limited gaps between the various project packages. Ensuring a detailed review is undertaken of each package by the technical team will be vital to maintain a clearly defined technical scope. In addition, it would be prudent to ensure that sufficient technical support is available in circumstances where technology could advance during the lifetime of the project design and build. It is also worth considering how to allow for technological advances to be captured by appropriate change provisions. Finally, for any party, it is important to review whether there are any provisions relating to mistakes to technical requirements, which may be mistakes due to developments in technology down the line.
- Delay—where there are multiple packages of work progressing simultaneously and interweaving across a wider project program any delay is likely to impact contingent works to the extent there is not sufficient float in the program. Developers should look to ensure that contractors have sufficient float in their own program to absorb delays in other packages as well as within the relevant package itself (to the extent possible). From a legal perspective, any extensions of time should be narrowly drafted and limited wherever possible. Concurrent delay (i.e.

a scenario where there are two delay events occurring simultaneously and only one event entitles the Contractor to an extension of time and the other event is running concurrently, the Contractor shall not be entitled to any extension of time) should also be excluded. Additionally, relief should only be made available to a contractor where the time for completion is delayed (or if any key milestones are incorporated into the contract structure).

- *Variations*—one of the biggest reasons parties end up in disputes is as a result of variations. Ensuring that the terms for entitlement to time and costs for variations are clear and unambiguous will help reduce the risk of a dispute down the line. In particular, in this context, it would be prudent to carefully set out entitlement for changes to technology, design development and delays due to supply chain issues.
- Change in Law/Regulations—with any parties looking to contract in a developing field, it is important to consider the impact of any changes in law or regulations which may affect the existing contractual terms. It may be that provision needs to be made for the parties to renegotiate elements of the contract should regulations change and cause illegality/ material changes to the risk allocation. Over the years, developers have assumed a greater share of change in law risk. However, a few years ago the general position was that contractors should know their industry and anticipate how the law may change and develop. It may be possible that hydrogen could (as a new industry) follow this approach where contractors properly bear the risk of changes in law that are reasonably foreseeable.
- Dispute Resolution Clauses—typically FIDIC based contracts have a tiered-dispute resolution clause. Where an expert or engineer with requisite experience forms part of that process, it is worth considering whether (1) an appropriate individual with the requisite experience exists, and (2) if there are appropriate people, whether the pool of individuals is big enough to not cause a conflict issue. It is also vital to ensure that appropriate joinder provisions are included across the suite of documents to allow related contractual disputes to be considered together.

The developer will need to balance the commercial and legal risk from the menu above to meet the practicalities of the negotiations.

A BANKABLE STRUCTURE

Although hydrogen is a nascent technology, it is likely, looking at other technologies that projects will be developed on a multi-contracting structure

Multi-Contract Hydrogen Projects

(with degrees of varying package numbers). Looking at other energy technologies, we expect this will be a bankable approach provided that developers ensure the packages contain a balanced risk profile that protects against the inherent interface risk within the structure.