EXPLORATION & JOINT OPERATING AGREEMENTS +
Presented at the Utica Shale Issues In Law, Practice and Policy Conference
September 13 & 14, 2012

Donald P. Fischbach¹ and
Lindsey E. Sacher²

I. Introduction

In light of the high level of risk and potential reward associated with the exploration and production sector of the oil and gas industry, it is critical that industry participants exercise extreme care and caution in selecting and negotiating the agreements that will govern their interactions and business dealings with one another. Given the rapid expansion of the industry in Ohio and elsewhere, parties must also consider and incorporate into their agreements the implications of new technologies and operation in previously-unexplored regions. This paper will briefly touch upon three types of agreements used frequently throughout the exploration and production industry: the exploration agreement, joint operating agreement, and master service agreement. While each type warrants extensive analysis for a full understanding, this article will summarize and discuss key provisions of each agreement, and will offer suggestions for consideration in drafting and negotiating such contracts.

II. The Exploration Agreement

The initial, “exploration” phase is one of the riskiest and most complex stages of any new drilling and production project, requiring large investments of capital to fund the technology, information, equipment, and labor needed to successfully commence drilling and production of crude oil and natural gas.

In light of the wide range of risks and uncertainties at play during the exploration phase, most projects require the skill and expertise of multiple industry participants to share not only in the

¹Don Fischbach is a partner in the Energy and Natural Resources, Oil, Gas & Shale practice group at Calfee, Halter & Griswold LLP in Cleveland, Ohio. With more than 30 years of experience in the oil and gas exploration and production business, Don counsels clients on matters of lease acquisition, operations, finance, land, exploration, risk management, government relations/regulation, labor, and litigation.

²Lindsey Sacher is an associate at Calfee, Halter & Griswold LLP. Lindsey specializes in Business, Corporate, and Commercial Litigation and is also a member of Calfee’s Energy and Natural Resources, Oil, Gas & Shale Practice Group.
risks and responsibilities associated with exploration, but also in the returns and rewards that can potentially result from their investment and labor. The exploration agreement, which provides a roadmap for how the various parties will interact, and how the risks and rewards of the overall endeavor will be allocated, is therefore the cornerstone of any relationship between participants in an exploration and production project.

There are several common scenarios that may give rise to a multi-party exploration arrangement, thereby creating the need for an exploration agreement. One common scenario arises when an exploration and production company purchases an exploratory prospect idea from a third party. In this scenario, the third party (often a geologist or landman) agrees to provide the exploration company his work in an area along with any leasehold he has obtained in exchange for negotiated consideration. Another common scenario generating an exploration agreement is when an exploration company owning a substantial amount of land, leasehold, or drilling rights sells a portion of its prospect and property rights to another exploration company for negotiated consideration. In both instances the negotiated consideration normally includes a cash payment along with some type of interest in the prospect area as it develops. The ongoing prospect interest component can take many shapes and sizes but may include an overriding royalty interest, a carried interest, or a combination of the two.

Under either scenario, the parties may choose to structure their arrangement as a separate business entity, such as a partnership or joint venture. The more common approach, however, is to treat the arrangement as a purely contractual relationship. The latter approach is generally seen as more protective of each party from a liability standpoint, as it minimizes the risk that one party will become liable for the actions of the other in the event of an accident, environmental violation, etc.

Unlike many types of contracts in the oil and gas industry, there is no standard “form” exploration agreement. Exploration agreements can therefore range from simple agreements between two parties covering only a few potential drilling locations, to complex, multi-party arrangements covering thousands of locations with drilling prospects at multiple depths and/or separated by thousands of miles. Nevertheless, a few basic provisions appear, in one form or another, in nearly every exploration agreement. Many of these provisions govern the procedure by which the parties will conduct their operations, and also address the rights and responsibilities each party will bear at each stage.


The first step in carrying out an exploration project is to determine the area in which the parties agree to conduct their exploration, drilling, and production activities (the “Project Area”). Accordingly, an exploration agreement defines the Project Area, and/or contains provisions directing which of the parties shall have control over such definition, including the tracts of land that will be covered, as well as the depths and specific formations to which drilling will occur. As described more fully below, the scope of a given project area may often depend on the ability of the parties to obtain lease and drilling rights, as well as the availability of seismic data for a given geographic area.
Once a Project Area has been defined, the parties to an exploration agreement may wish to define an “Area of Mutual Interest,” or AMI, which is the geographic area in which the parties agree that any rights obtained by one party following the execution of the exploration agreement, must be shared proportionately between the participants. The AMI may encompass all or only a portion of the Project Area. An exploration agreement may also provide for multiple AMIs within the Project Area if warranted by the Project Area’s size.

After settling on a defined Project Area and AMI, the participants in an exploration project must complete several tasks prior to the commencement of drilling. Most importantly, the parties must obtain rights to drill and produce hydrocarbons from the Project Area. This requires the parties to obtain leases from the owners of mineral rights (or otherwise obtain those rights) within the Project Area. Once obtained, science (normally geology and seismic data) is used to determine the most prospective locations for wells to be drilled to evaluate the Project Area leasehold. Once these initial locations are identified, the participants may establish a “unit” for drilling, as is required under most state statutes and regulations. See, e.g., Ohio Revised Code § 1509.24; Ohio Administrative Code § 1501:9-1-04 (setting forth requirements for well spacing and unitization).

In many cases, these tasks may have been accomplished by one or more of the participants prior to the execution of an exploration agreement. Often, one or more of the participants may already have some leasehold rights covering a portion of the Project Area. If additional rights are required, however (which may be the case if the participants have only rights to some of the tracts within a Project Area), the exploration agreement should address which participant shall be responsible, financially and otherwise, for obtaining the rights from the mineral owners. Normally, the AMI provision of the exploration agreement will require that any leasehold rights obtained within the Project Area shall be shared, or at least offered, proportionately between the participants.

Similarly, where one party has already obtained the seismic data necessary for the project, the parties may agree, pursuant to the exploration agreement, that a portion of the rights to such data will be contributed to the other participants in exchange for some compensation. Where further data is required, the parties should address in the exploration agreement the scope of such data, including whether 3-dimensional data and other advanced technology will be used, the timeframe in which it is to be acquired, and how the costs and access to the core data will be shared.

Once the parties have obtained the necessary drilling rights and information with respect to the Project Area, and are ready to begin drilling, they generally must agree on the location of each prospect, meaning the specific location in which a well is to be drilled. The exploration agreement therefore should address how the participants will select each prospect, including not only the general area, but also the specific depths and formations to which drilling will occur. Some exploration agreements, particularly in situations where one party has greater expertise than the other, may give one party the exclusive right to identify prospects. Other agreements

3 If the property in which one party holds leasehold rights is not producing prior to the execution of the exploration agreement, that party will often agree, pursuant to the exploration agreement, to contribute a proportion of its rights to the other participant(s) in exchange for compensation.
may provide for a more collaborative process, giving each party input into the decision. In addition to providing for the selection of prospect sites, the exploration agreement also must address which party will “operate” the Project Area and be responsible for the physical drilling efforts, as well as the scope of such efforts, including (if known) the number of wells to be drilled, and amount of time in which the drilling must be completed.

Often, an exploration agreement will require that, prior to the commencement of full-fledged drilling efforts in any given prospect, exploratory wells will be drilled in each prospect area to determine whether the prospect is viable for commercial hydrocarbon production. The agreement similarly should address (1) how the parties will share the cost of drilling any test wells, (2) the procedures the parties will follow if it appears, based on the results of the preliminary drilling, that a given prospect is not viable for development, and (3) the procedures to be followed if not all participants agree on the location or any other aspect of an exploratory well.

If the parties determine that an area is a viable prospect, they generally will wish to drill subsequent developmental wells in the prospect area. Accordingly, an exploration agreement should provide specific procedures for the proposing and drilling of subsequent wells in a given prospect.

It is common for an exploration agreement to provide the participants with procedures to “opt-in” or “opt-out” of proposed leasehold acquisitions or the development of a specific prospect within the Project Area. While a party may wish to opt-out for a variety of reasons, the exploration agreement should outline the procedures by which a party may exercise its right to participate (or not participate) in the drilling of subsequent wells, and the impact of such a decision. Generally, exploration agreements will provide that if a party chooses not to participate in the drilling of a subsequent well, the party will have no rights to the revenue generated and may lose all rights within that particular prospect area. The agreement should specify the time frame in which one party must notify the other of a proposal to drill a subsequent well, the time frame in which the other parties must respond with a decision to participate or not, and the ramifications of any such election.

a. Provisions Related to Indemnity and Financial Protection

In addition to provisions governing the procedures the parties will follow with respect to their exploration and drilling efforts, exploration agreements often contain a number of provisions designed to protect each party from the risks, financial and otherwise, associated with the contractual relationship.

For instance, exploration agreements often require each participant to provide the other(s) with proof that it will be able to pay its share of costs in a timely manner. Many agreements accomplish this by requiring participants to set up advance accounts, placing a certain amount of funds into a third-party account from which project expenses may be withdrawn periodically. Such provisions are more common where one or more of the participants is a smaller and/or lesser-known entity. Parties may also wish to agree that the amount to be “advanced” by any party shall be capped, as well as provisions for how the participants will proceed in the event that project expenses exceed the amount allocated by each party. Other options include a bonding
requirement of a set amount or an agreement to prepay one’s proportionate share of costs of an operation into an escrow account opened to hold project expense monies.

Parties to an exploration agreement may also wish to include provisions detailing liability issues that may arise in the event of an accident or violation related to the exploration project. Often, each participant will agree to indemnify the other(s) for damages/liability that result from the participant’s own gross negligence or willful misconduct. It is less common, however, for participants to indemnify for ordinary negligence, and some states’ statutes may even prevent such provisions from being enforced, or at least limit enforcement to specific circumstances.

b. Provisions Related to Sharing of Information

In addition to the sharing of risks and rewards, participants to an exploration agreement should consider addressing how they will share information related to the project, both between and among themselves, as well as with the outside world. Participants may wish to keep certain information - including the fact of their arrangement itself - confidential for a number of reasons. For instance, if the participants believe they have discovered a new area with commercial hydrocarbon potential, and believe they will expand their operations geographically in the future, they may fear that disclosure of their arrangement and activities will entice potential competitors to move into neighboring areas. For similar reasons, participants may also wish to keep confidential any seismic data generated regarding the Project Area and any surrounding areas that otherwise remain unexplored. Accordingly, the exploration agreement may contain certain confidentiality provisions, requiring each participant to avoid disclosing the details of the agreement to any third party.

Nevertheless, where one or more participants in an exploration agreement is a publicly-traded company, certain disclosures to the public and shareholders may be required. Under such circumstances, the parties should address in the exploration agreement how such disclosures shall be managed, including methods by which the participants will ensure that all public announcements and disclosures comply with SEC rules and regulations.

III. The Joint Operating Agreement

While exploration agreements serve as the “cornerstone” of the exploration phase, they often incorporate a Joint Operating Agreement (“JOA”) to more fully detail the business relationship between the parties when both have leasehold rights in a given geographic area (which generally is the case when parties have entered into an exploration agreement). The JOA is normally the controlling agreement between the parties electing to participate (i.e., invest) in the drilling of a well within a Project Area.

The American Association of Petroleum Landmen (AAPL) has developed a form JOA, revised most recently in 1989 (the “1989 JOA”), which is generally used as a model agreement throughout the industry. Of course, parties to a JOA often negotiate their own terms and modify
the standard format to fit their own needs, and often re-submit the same JOA with respect to each project they undertake.\(^4\)

A typical JOA designates one party as the operator, and the others as non-operators, and defines a specific contract area (normally, the unit) within the larger Project Area. Like an exploration agreement, the JOA normally gives the non-proposing party rights to opt-in or opt-out of each drilling proposal. The JOA often expressly states that no partnership or joint venture exists between the parties thereto. This provision is critical from the standpoint of each party to a JOA, as it minimizes the risk that a party may become jointly liable for any actions of another.

The 1989 JOA contains a number of detailed provisions governing the procedures to be followed by the operator and non-operator in conducting their drilling operations. For instance, the 1989 JOA provides that prior to the commencement of any drilling operation, an operator must give notice to the non-operator, which will then have a set time period (often 30 days) from the receipt of such notice to elect whether or not it will participate in the operation. Thereafter, the operator must begin its operations within a set time period (often 90 days).

In the event that a party to the JOA elects not to participate in the drilling of a subsequent well, the parties may decide that one of the following events will occur: (1) the non-participating party relinquishes its entire interest in the prospect area, except with respect to the risk well and surrounding acreage; (2) the non-participating party is deemed to have “farmed out” its interest in the well to the consenting party, or (3) the non-participating party becomes subject to a non-consent percentage penalty, which often requires a non-consenting party to reimburse the consenting party for a percentage of its costs in drilling the well if production is found. Such penalties may increase depending on the riskiness of the drilling operation, and normally exceed 100%. The 1989 JOA includes such penalty provisions as an incentive to encourage the drilling of subsequent wells, regardless of whether all parties have consented.

Also of note, the 1989 JOA contains provisions governing the “casing point election,” which is a critical stage in the drilling process. Specifically, the 1989 JOA provides that when a well reaches the target depth, the parties must make a decision whether to set casing and continue drilling, or whether drilling should cease. The JOA also governs the procedures that the parties may follow for abandoning a given well.

While a full discussion of the 1989 JOA’s provisions is beyond the scope of this article, the typical JOA also contains provisions relating to insurance, financing, indemnity, and accounting. A typical JOA may also be accompanied by a number of exhibits related to these provisions, which further guide the business relationship between the participants. For instance, JOAs commonly incorporate an exhibit that details the accounting procedure to be used by the parties in keeping records of the expenses and revenues associated with drilling projects. As with any provision, the parties may choose to modify the procedures at any time, and should tailor those provisions to the parties’ specific needs.

\(^4\)A copy of the 1989 JOA is attached to this article (not for use or further distribution).
IV. The Master Service Agreement

In addition to entering an exploration agreement and a JOA, the operator of a well will normally have agreements with the prospective vendors and/or contractors it may wish to hire to perform services at the well site. These agreements, sometimes known as Master Service Agreements (“MSA”), provide the terms and conditions applicable for services provided or delivered to a well site. While a MSA does not obligate an operator to hire a particular vendor at any given time, it allows the operator to have a base agreement already in place with any vendor it may elect to use in the future; by having the terms of service spelled out in advance, the MSA allows operators to quickly hire a given vendor and commence work almost instantaneously on a particular job. Importantly, the MSA is normally supplemented by specific work or purchase orders to fully specify the scope of the work to be completed. The work or purchase order does not alter or amend the terms of the MSA, but rather serves as a “gap-filler” to provide greater specificity regarding each project.

The key features of the MSA are the provisions related to insurance, indemnity and risk allocation. A MSA will frequently require prospective vendors to maintain minimum levels of liability insurance, including but not limited to general liability, automobile, and worker’s compensation policies. A MSA often may require that the operator be named as an “additional insured” under any insurance policy held by the vendor.

With respect to indemnity and/or risk allocation, the parties to a MSA may agree to one of several indemnity/risk allocation schemes for claims arising out of injury or damage sustained at the well site. Under the most operator-friendly of these schemes, a vendor will agree to indemnify the operator for any claim or loss by any party arising out of damage or injury, including damage or injuries resulting from the operator’s own actions. Several states, including Texas and Louisiana, have enacted statutes which may, in certain circumstances, invalidate any such indemnity provisions to the extent that they purport to provide a party with indemnity for claims arising out of the party’s own negligence. Other states, including Ohio, have enacted anti-indemnity statutes that apply generally to “construction contracts.” See Ohio Revised Code § 2305.31. In many of these states, as in Ohio, it remains unclear whether operations in the oil and gas production industry are covered by such construction statutes, as the minimal case law dealing with the issue leaves the question open. See, e.g. Brzeczak v. Standard Oil Co., 4 Ohio App.3d 209 (1982) (assuming, but not expressly holding, that R.C. § 2305.31 is applicable to contracts in the oil and gas industry). Yet as the oil and gas industry continues to grow in Ohio and elsewhere, the applicability of such statutes to drilling contracts will have to be addressed in some way, whether it be through the legislature, the courts, or both.

V. Conclusion

While the types and contents of the various agreements used in the exploration and production sector are generally similar from one project to another, it is important that industry participants evaluate the fact and circumstances surrounding their business transactions and proposed operations when negotiating any of the above-mentioned agreements. As the exploration and production industry expands rapidly throughout Ohio and other states, industry participants must develop and modify the terms and types of agreements used to govern their business.
relationships with one another, and should carefully consider the risks and implications that are sure to result as technology evolves and new geographic regions are explored in Ohio and elsewhere across the country.

In short, the arrangements reached by the parties can and should be documented in an agreement that is tailored to the specifics of their situation. One of the roles of the attorneys involved will be to ensure that our clients have considered as many of the issues ancillary to the base agreement as possible, thereby working to minimize the risks and maximize the rewards associated with doing business in this rapidly-growing industry.
Donald P. Fischbach
216.622.8336
dfischbach@calfee.com

**Donald** has more than 30 years of experience in the oil and gas exploration and production business. He counsels clients on matters of lease acquisition, operations, finance, land, exploration, risk management, government relations/regulation, labor, and litigation.

Don also is experienced in NYSE, SEC and FERC rules, equity transactions and credit facilities.

Before joining Calfee, Don spent 10 years as General Counsel and Secretary for an independent oil and natural gas exploration and production company, where he led or participated in legal projects that included the initial public offering of an NYSE company, negotiating credit facilities, bond transactions, asset purchase and sales agreements, and complex litigation. He is experienced in environmental and regulatory compliance matters, including self-audit and reporting processes, as well as marketing and transportation agreements for crude oil and natural gas. Don has also worked as an inter-corporate landman responsible for acquiring oil and gas leasehold and exploration rights.

Don is a member of the American Bar Association, the Rocky Mountain Mineral Lawyers Association, the Institute for Energy Law, Oklahoma Independent Petroleum Association, the National Association of Corporate Directors and the Society of Corporate Secretaries and Governance Professionals.

Don joined Calfee in 2012.
LINDSEY focuses her practice on business, corporate and commercial litigation and on public law litigation. She represents a variety of clients, from small businesses and municipalities to Fortune 500 companies. Lindsey also is a member of Calfee’s Energy and Natural Resources (Oil, Gas & Shale) group.

She is a member of the Cleveland Metropolitan Bar Association, where she is involved in the 3Rs program in area high schools. She is also a member of the American Bar Association and the Federal Bar Association (Northern District of Ohio). Her pro bono work includes representing Legal Aid clients.

Lindsey earned her J.D., magna cum laude, in 2011, from Case Western Reserve University, where she was a contributing editor for the Law Review and a member of the Moot Court team. She also earned a B.S., magna cum laude, in Secondary English Education, from Miami University (2006).

Lindsey joined Calfee in 2011.
We realize that our clients expect intellectual, sophisticated legal counsel - and more. They want responsive attorneys who take the time to understand their business, their industry, and their definition of a “win.”

At Calfee, we strive to make our clients and their endeavors successful. We are proactive, strategic and comprehensive in counseling entrepreneurs and start-ups, Fortune 500 companies, government agencies and municipalities, and individuals. We understand the industries in which our clients work, allowing us to provide innovative legal solutions that also make business sense.

Ranked one of the top law firms in Ohio, our offices are in Cleveland, Columbus and Cincinnati, but our reach is much greater. Calfee is the sole Ohio member of Lex Mundi, the world’s leading association of independent law firms. Comprised of 160 member firms with 15,000 attorneys, Lex Mundi offers representation in each state throughout the United States as well as international representation in more than 150 countries.

Always focused on our clients, we are committed to remaining accessible, communicating regularly, maintaining a mutual trust and respect, and developing strong, long-term relationships.

Simply stated: Your success is the highest priority of our firm.
Calfee has decades of experience representing exploration and production companies, oil field service providers, pipeline companies, property owners and other industry participants in the Appalachian, Arkoma, Anadarko and Williston Basins. We have counseled these clients in connection with financing, leasehold and asset acquisition, development, production, transportation, sales, and distribution activities and agreements. Our clients have ranged from small, independent E&P companies and drilling partnerships to publicly traded oil and gas companies and large field service providers. Our lawyers have experience dealing in a wide range of real estate, mineral rights, tax, environmental and other legal and regulatory aspects of the business which supplement and are ancillary to oil and gas exploration. We also have represented investment banking and brokerage firms, investors, syndicators and institutional lenders, as well as general corporate clients engaged in energy-related activities.

Our experience encompasses a wide variety of mergers and acquisitions, public offerings and private placements conducted to finance oil and gas drilling and development operations, a variety of specialized financings, and related projects. Additional experience includes counsel concerning lease acquisition, operations, risk management, government relations and regulation, labor, environmental impact and reporting, and litigation.

Representative Experience

> Mergers and acquisitions of oil and gas companies
> Asset purchase and sale agreements
> Public and private offerings for drilling programs
> Project structuring for drilling, development and acquisition projects
> Negotiation of lease and farmout agreements; joint operating and joint venture agreements, and drilling and service provider agreements
> Environmental due diligence, reporting and compliance
> Negotiations with and representation in front of regulatory bodies including the federal and state EPAs, PUCO, the Ohio Power Siting Board and the Ohio Department of Natural Resources
> Exchange offers, both private and with the Securities and Exchange Commission
> Negotiation of gas purchase agreements for industrial end-users
> Financings for oil and gas borrowers and companies in connection with senior mezzanine debt financing arrangements
> Tax planning and counseling
The Appalachian Basin has experienced and will continue to experience dramatic growth in drilling to and producing from the Marcellus and Utica Shales. This activity calls for legal counsel with experience in dealing with the special challenges - both legal and operational - which are presented by this activity.

Members of this multi-faceted group have direct industry experience including as Director of the Ohio EPA, and with the addition of Donald P. Fischbach as Chair of the practice group, as General Counsel for an oil and gas exploration and production company with shale development experience. The scope and depth of Don’s expertise provides clients another experienced perspective on issues confronting their businesses, particularly in connection with legal services related to shale development.
The world is changing - rapidly. Concerns over energy security, environmental impacts, volatile commodity prices and ever-increasing demands for energy are creating unprecedented challenges and opportunities for our clients.

We understand the complexity of our clients’ energy challenges. Calfee's Energy Industry Team focuses on these challenges day in and day out, providing sophisticated and practical advice. Our experience is extensive and includes representing clients that range from public utilities, coal companies, mining supply companies, energy-related production companies, alternative energy source developers and providers, and project developers. We represent Ohio utilities and renewable energy developers, as well as energy businesses in all aspects of power project licensing, permitting, financing, restructuring and bankruptcy, construction and operations for regulated and unregulated energy-related entities.

Calfee provides a broad range of legal services to the Energy Industry that include regulatory, government relations, construction, transactional, environmental, intellectual property, restructuring and bankruptcy, real estate finance and litigation counseling and representation.

**Regulatory**

Calfee represents utilities and other interested parties in regulatory proceedings before the Public Utilities Commission of Ohio, Ohio Power Siting Board and the Mine Safety and Health Administration and in administrative proceedings before city councils and planning agencies. We have counseled companies in merger approval, industry restructuring and alternative regulation proceedings, rule making and complaint proceedings, and facility siting and municipal right-of-way reviews.

**Transactional**

Calfee’s Business Transactions Department has a broad spectrum of transactional experience with energy companies, including electric power, oil and gas producers, coal companies (both surface mining and deep hole), and ash reclamation. Members of the group have been the lead in engagements where energy industry clients have:

- bought and sold power companies;
- financed and developed synthetic fuel plants;
- borrowed money on a secured and unsecured basis;
- engaged in transactions involving derivatives and SWAPS;
- issued bonds and other public debt and notes;
negotiated with railroads for the use of rail cars and rail availability;
> leased sidings;
> negotiated payment for unsecured creditors in bankruptcy proceedings;
> negotiated leases with port authorities;
> dealt with trucking issues involving independent contractors;
> negotiated oil and gas, mineral and coal sales contracts and leases; and developed plants which produce enhanced and clean coal.

We have also served as lead counsel for lenders and contracting parties for engagements involving stressed and bankrupt energy companies.

Calfee attorneys are involved in the formative stages of development, staffing, and financing for alternate energy projects in the wind turbine and gasification industries.

**Government Relations**

Calfee’s Government Relations practice group provides a unique perspective into the highly regulated energy arena. Whether our clients require legislative lobbying, regulatory and technical expertise or execution of administrative matters, our depth of experienced professionals offer years of expertise and knowledge based relationships in the energy industry with years of legal and lobbying on energy issues. Calfee clients capitalize on our strengths when analyzing governmental issues, developing and executing successful strategies, and adding unique insight ranging from the General Assembly to the PUCO. We work together to resolve our clients’ issues involving the executive and legislative branches of government, as well as commissions, authorities and other special purpose entities.

**Environmental**

Calfee has experience with all aspects of the environmental compliance requirements associated with the energy industry. From the permitting requirements associated with obtaining the raw materials for energy production, to the compliance requirements associated with distribution, Calfee can provide a full range of environmental compliance counseling for the energy industry.

**Litigation**

Calfee has successfully represented energy industry clients in a myriad of litigation matters involving complex contract and commercial disputes, government investigations, employment and labor matters, real estate and environmental disputes, class action litigation and ERISA claims. Calfee also has extensive experience representing energy industry clients in tort, accident and product liability claims including asbestos and toxic tort defense. Calfee works closely with clients to aggressively prevent, resolve and defend litigation matters at all phases of a dispute to reach the best business resolution for our clients.
Construction

Calfee takes a multi-disciplinary approach to energy construction projects tailoring its advice to the specific needs of the client. Calfee has been involved with advising and drafting contract documents, assisting in contract administration, and representing clients in contract disputes in all phases of energy related construction. Calfee has provided assistance to its clients with new construction, scheduled outages, transmission issues, alternate energy projects, including wind and gasification, and power generation systems and storage. Calfee attorneys are sensitive to assessing risk in all phases of a project and are additionally sensitive to cost issues. This broad range of experience on varied types of energy project informs our decisions and protects our clients’ interests throughout the life of a project.

Intellectual Property

The U.S. Patent and Trademark Office will, on petition, accord "special" status to all patent applications for inventions which materially contribute to (A) the discovery or development of energy resources, or (B) the more efficient utilization and conservation of energy resources.

Examples of inventions in category (A) would be developments in fossil fuels (natural gas, coal, and petroleum), hydrogen fuel technologies, nuclear energy, solar energy, etc. Category (B) would include inventions relating to the reduction of energy consumption in combustion systems, industrial equipment, household appliances, etc.

Calfee's Energy Industry Team is staffed with patent attorneys and scientists that are skilled in the preparation and prosecution of patent applications for energy and energy-related inventions. The Group includes patent attorneys with degrees in physics, electrical engineering, chemistry and chemical engineering, and mechanical engineering. In addition to their technical education backgrounds, many of our patent attorneys have spent time actually working in their technical fields as engineers and scientists prior to becoming patent attorneys.