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SECTION REPORT



OIL, GAS & ENERGY RESOURCES LAW
SECTION OF THE STATE BAR OF TEXAS



www.oilgas.org

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Chair's Message

Welcome to the Section's second renewables-focused Section Report! The Section is excited to publish a second volume of the Section Report entirely devoted to renewable energy law topics, both for section members who routinely practice renewable energy law and for section members (like myself) who do not normally practice in this area but who increasingly encounter such issues. Brent Stahl has edited both renewables Section Reports – Thank you Brent for your great work in expanding this Section's focus on renewable energy practices.

The Section is co-sponsoring two continuing education seminars this month – the 9th Annual Oil and Gas Disputes Course on January 19-20 and the UT Law CLE Renewable Energy Law Essentials and Institute on January 30-February 1. Please see oilgas.org for more information on these courses.

Additionally, the Section is very excited to join The Foundation for Natural Resources and Energy Law to host The Law of Permian Basin Oil & Gas Development and Operations May 25-26, 2023 in Santa Fe, New Mexico. Both organizations have been working hard to develop a program focused on the Permian Basin, with topics including a keynote overview of the state and future of the Permian, legal differences between development and operations in Texas and New Mexico, challenges related to flaring and venting in the region, case law and litigation updates, important and evolving oil and gas royalty issues, lease expiration and termination, surface access and damages issues, developing federal and state minerals, midstream, water management, ethics, and more. Please see fnrel.org/programs/pb23 for more information on and to register for this course.

The Section is making good progress on the new and updated website, and we hope to bring that new site live in the next three months to be available to all Section members. We hear repeatedly how many of our Section members use the site's library feature – if you are not familiar with it, please take a look. It is a repository of past section reports and continuing education articles and can be found at oilgas.org.

Applications for Section-sponsored internships at the Electric Reliability Council of Texas, the Public Utility Commission of Texas, the General Land Office and for the Michael E. McElroy Memorial Railroad Commission of Texas Internship are posted on oilgas.org. If you know of a law school student interested in a career in oil and gas law, please pass this information to him or her!

I want to end by again thanking the many, many of you who contribute to this Section through your involvement with the Council or by contributing to the Section's CLE events and Section Report. This Section is fortunate to have such a large and invested membership, and we all benefit from the contribution of so many of our members.

Sincerely,

Katy Wehmeyer

Editor's Message

Welcome to the second edition of an OGERL Section Report focusing on renewable energy law topics. Our first renewables only edition was published in Fall 2020 and we are excited to publish this second group of renewables-focused articles.

This Section Report begins with a remarkably interesting profile (written by Trace Burton) of one of OGERL's past chairs -- Hayden W. Head, Sr. And then we have five thought provoking articles looking at a variety of renewable energy law topics. In this Section Report:

- Tricia Jackson provides a comprehensive overview of real estate issues to consider for solar energy tax equity transactions.
- Emily Beagle, PhD, Joshua D. Rhodes, PhD, and Michael E. Webber, PhD share their excellent data-driven analysis of the economic and environmental impacts of renewable energy and energy storage projects in Texas.
- Gary Zausmer, Sara Berkeley Churchin, and Paula Lear keep us up to date with recent Texas renewable energy law case analysis.
- Ruta Skučas, Maria Faconti and Kimberly Frank examine the opportunities presented by changes in how electric power markets look at reactive power compensation issues for renewable energy projects.
- Edmond R. McCarthy, Jr. & Edmond R. McCarthy, III explore the Texas Supreme Court case of *Coyote Lake Ranch LLC v. City of Lubbock*, its impact on water, mineral and surface estate rights, and how parties can strategically plan to address the issues presented by *Coyote Lake Ranch* and related decisions.

Thank you to all of the contributors to this Section Report – they put in a huge amount of work to prepare the materials compiled. We really appreciate the dedication, hard work and thoughtful scholarship that all of the authors bring to OGERL.

Finally, we want to point out that if you are receiving this Section Report, it is because you are a member of the OGERL Section. As a member of the Section, we remind you that you can always access past Section Reports and many CLE presentations via the Section's website: www.oilgas.org.

If you are interested in contributing an article for future Section Reports, please contact Rob Hargrove, the Section Report Editor for OGERL at (512) 493-9615.

Sincerely,

Brent Stahl
Editor for Vol. 47, No. 1



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PAST CHAIR PROFILE: HAYDEN W. HEAD, SR.

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The Oil, Gas and Energy Resources Law Council of the State Bar of Texas periodically prints articles profiling Past Chairs of the Council. Due to the hard work and dedication these Past Chairs provided both to the Council and to the practice of oil, gas and energy law in Texas, the Council felt that recognition of these Past Chairs was due. The following Past Chair profile is of Hayden W. Head, Sr. (1915-1987), who was Chair of the Council during its 1954-1955 term.

There are a precious few men and women alive today from what has become known as the “greatest generation,” those Americans who served their country during World War II and returned home to dedicate their lives to civic endeavors and improving their communities. One such leader was Hayden Wilson Head, Sr., a Corpus Christi-based attorney whose contributions to the lives of South Texans are still felt today.

Head was born in Sherman, Texas in 1915. His father was an attorney and his grandfather was a justice on a state appellate court. After graduating from Austin College in 1934, and the University of Texas School of Law in 1937, Head was licensed to practice law in Texas. However, like many of his generation, the United States’ entry into World War II was a call for Head to serve his country, and his legal career was put on hold.

From 1941 to 1945, Head served as an Army Air Corps fighter pilot in the European theater, attaining the rank of captain. A mere three weeks before Germany’s surrender, his aircraft was shot down over the Baltic Sea coast. Upon his capture by the enemy, he was confined to a Nazi prison camp. Head was awarded the Distinguished Flying Cross with nine oak clusters as a result of his service.

Upon his return stateside and to the practice of law, Head was the founder of the Head, Kendrick & Head law firm in Corpus Christi, which eventually merged with another local firm to become Kleberg & Head, one of the largest and most respected law firms in South Texas. Head’s legal practice focused on representation of the burgeoning petrochemical industry in and around Corpus Christi, and his clients included DuPont, Celanese and other companies that were major employers and pillars of the Texas economy. His client list also included many of the leading independent oilmen of the day, such as Guy Warren and Maston Nixon, as well as major land owners such as Rand

Morgan. Head would often lobby Congress in Washington D.C., on issues important to Texas business, including deregulation of natural gas for Southern Minerals Corporation, a longtime client. Head’s firm represented the mineral lessors in *Samano v. Sun Oil Co.*, 621 S.W.2d 580 (Tex. 1981), in which the Supreme Court of Texas determined whether a sixty-day limitation period for drilling or reworking operations was applicable to the secondary term of a mineral lease. Head’s clients prevailed, with the Court finding that the mineral leases expired because the lessees failed to produce, drill, or re-work their existing operations within 60 days from the date production stopped.

Along with his successful law practice, Head threw himself into improving his South Texas community. While he never held elected office, Head served in numerous leadership roles, including service for the Nueces River Authority, Spohn Hospital, the American Red Cross, Corpus Christi’s Airport Advisory Commission, the Area Development Committee, and the Coastal Bend Council of Governments. It was through these organizations that Head was able to champion such projects as the establishment of Naval Station Ingleside, the deepening of the ship channel (fostering the growth of the Port of Corpus Christi), and the building of Choke Canyon Reservoir. Head was also a director of the First City Bank in Corpus Christi, chairing its trust committee.

Head had a keen interest in local government and was of the firm opinion that the “commission municipal” format of government should be replaced by the “council-manager” system that is common today. He formed a slate of candidates to run against a slate of commissioners allegedly tied to George Parr’s political machine, and Head’s slate prevailed based on a council-manager platform. Out of this triumph came the Better Government League, a coalition of business leaders led by Head that backed candidates for local office from the 1940’s through the 1970’s.

Politically, Head leaned towards conservative viewpoints, which eventually caused him to move from the conservative wing of the Democratic Party to the Republican Party. Head was a longtime supporter of U.S. Senator John Tower, who was quoted as saying “I’ve never heard a disparaging word about Hayden Head from anybody, and that’s pretty rare in this business.” Head was

known as a political kingmaker in Corpus Christi, so much so that whenever a local political candidate stated that he had not yet decided whether to run for office, it was often construed as “Hayden Head hasn’t returned my telephone call.” His fundraising prowess made his law office a necessary stop for any aspiring political candidate for local, state or federal office, with Head reportedly able to raise as much as \$50,000 (in 1970’s dollars!) in a single luncheon by tapping his formidable network.

A dedicated alumnus of the University of Texas School of Law, Head led the effort to establish 32 endowed teaching chairs of at least \$1 million each at his alma mater. As Chairman of the University of Texas Development Board from 1983 to 1985, Head raised funds to endow chairs in science and engineering, and for the purchase of the Pforzheimer Library of English Literature. Head was named a Distinguished Alumnus of the University of Texas, and was awarded a Presidential Citation by the school, both in 1987. After Head’s death, a large group of his friends and colleagues established the Hayden W. Head Memorial Endowments, which created two endowed chairs valued at \$1.25 million each, one being the Hayden W. Head Regents Chair for Faculty Excellence in the School of Law, and the other the Hayden W. Head Regents Chair in the Plan II Honors Program.

When not practicing law, Head and his wife, Annie Blake Morgan Head, would spend time at their ranch in Zavala County near Crystal City. It was in July of 1987, while flying his twin-engine Cessna 421, he crashed into a hangar on his ranch and the plane caught fire. A ranch foreman ran to pull Head and his wife from the burning wreckage, but, true to form, Head insisted that his wife be removed first and she survived. Head perished in the crash at 72 years of age.

Not surprisingly, the example of government service and leadership set by Head carried over to the next generation of his family. His son, Hayden W. Head, Jr., served in the United States Navy, practiced law in the family firm, and was appointed in 1981 by President Ronald Reagan to the United States District Court for the Southern District of Texas. Judge Head served as Chief Judge for the Southern District of Texas from 2003 until taking senior status in

2009. Judge Head stated that his father “was, first and foremost, an extremely fine and capable lawyer, one of the finest lawyers this state has ever produced. I mean that on a client basis, doing work for the clients he represented.”

The fruits of Head’s leadership and determination can still be seen in the Corpus Christi area today. A tireless advocate for greater access to air travel for South Texans, the main terminal at Corpus Christi International Airport is named in his honor. The Port of Corpus Christi is the largest port in the United States based on revenue tonnage, boasts a 45-foot deep channel, and accounted for 58% of the nation’s crude oil exports in 2021. Choke Canyon Reservoir provides a critical source of drinking water for Corpus Christi.

What has been missing since Head’s passing is the kind of leadership that he provided. One politically active Corpus Christi attorney stated that “we’ve not seen his kind since his departure. There were very few people who could pick up the phone and call the leading citizens, across the board, and call a meeting to discuss something important to our community. He was one of those few. He didn’t pull any punches; people knew where he stood. Since his death, there has been a total absence of the kind of leadership and responsibility that he was known for.”

Indeed, the world today could use a few more leaders like Hayden W. Head, Sr.



TEXAS SOLAR TAX EQUITY TRANSACTIONS: A REAL ESTATE PERSPECTIVE

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I. Introduction

Tax equity transactions for utility scale solar projects are complex endeavors, requiring several levels of analysis by specialists in finance, development, legal and everything in between. This article will address common real estate due-diligence issues for Texas solar tax equity transactions, including site control, title and survey, minerals, landowner estoppels, and other real estate closing deliverables. These deliverables are typically included as conditions precedent to closing under an equity capital contribution agreement (“ECCA”), which governs the overall tax equity investment process. Any experienced solar development and tax equity investment professional knows that unresolved real estate issues can delay closings. Because of this, it is important to involve real estate attorneys early and often to properly evaluate and resolve the types of matters discussed in this article.

II. Site Control

Site control due diligence is an important component of a solar tax equity transaction because every project is different and will require a tailored approach to the project specific issues that may come up during review. Acknowledging that some projects involve land that a project company has purchased in fee as well as easements for utilities and other non-panel facilities, for the purposes of this article, this site control section will focus on solar lease review.

a. Legal Descriptions

Like other types of real estate documents, solar leases must include a valid legal description of the property in order to confirm proper site control. A legal description is valid if it provides a way to identify the property under

the solar lease with reasonable certainty.¹ For large solar projects in Texas, legal descriptions will usually be in the form of a rectangular survey system legal description or a metes and bounds legal description.² When reviewing solar lease legal descriptions, all of the land included in the project should be covered in one or multiple leases. The legal descriptions in the lease(s) should exactly match the land being included in the title commitment or proforma and within the project survey, both of which will be discussed in more detail below.

b. Signatory Authority

The first step in confirming signatory authority for solar project land leases involves obtaining and reviewing the vesting deed(s) that convey ownership of the property within the project to the current landowners.³ These can come from the landowner themselves or can be pulled from the county real property records utilizing various information, including the landowner’s name, parcel IDs or tax IDs, recording information (i.e., book and page or instrument numbers), and short form legal descriptions.⁴ The review should confirm that (i) the landowner’s name in the vesting deed exactly matches the landowner’s name in the lease, and (ii) the land covered in the lease is captured in the vesting deed.⁵ The legal descriptions in the lease and vesting deed do not have to match exactly, so long as the land under the lease is covered by the deed.⁶

If project land is owned by a trust, a valid trust instrument or certificate of trust is required to confirm the proper person signed on behalf of the trust.⁷ If land is owned by an entity, the governing agreement for the entity will indicate who has signatory authority to sign on behalf of the entity.⁸ The governing agreement can be redated, as long as the reviewer is able to confirm signatory authority

¹ See *May v. Buck*, 375 S.W.3d 568, 576 (Tex. App.—Dallas 2012) (indicating that, in order to satisfy the statute of frauds, a legal description must identify the property with “reasonable certainty”).

² *The Public Land Survey System of the United States*, SIDWELL, <https://www.sidwellco.com/company/resources/public-land-survey-system/> (last visited December 14, 2022).

³ See Tricia Jackson, *Sign Here: Signatory Authority in Texas Renewable Energy Land Leases*, Emerging Energy

Insights (November 18, 2022), <https://www.emergingenergyinsights.com/2022/11/sign-here-signatory-authority-in-texas-renewable-energy-land-leases/#more-3857>.

⁴ *Id.*

⁵ *Id.*

⁶ *Id.*

⁷ See Tex. Prop. Code § 114.086.

⁸ Jackson, *supra* note 1.

on behalf of the entity based upon the portions of the agreement provided.⁹

c. Execution and Recording

After confirming that a solar lease involves the proper parties, a reviewer should ensure that all site control documents have been properly executed. Each lease must be properly dated and signed by the necessary parties, and each memorandum of lease must be properly dated, signed, and notarized. The parties and the legal descriptions in the lease and recorded memorandum of lease should match exactly, and the memorandums should be recorded in each county where the property is located.

III. Title Insurance

a. Owner's Policy and Endorsements

Tax equity transactions for solar projects usually occur in three phases: (i) ECCA signing, (ii) mechanical completion funding, and (iii) substantial completion funding.¹⁰ The first funding of a tax equity transaction can either occur at ECCA signing or at mechanical completion funding. If first funding occurs at ECCA signing, the funding amount will typically be a nominal percentage of the overall value of the tax equity transaction, and the larger funding amounts will be reserved for mechanical and substantial completion funding.

Whenever first funding occurs, whether at signing or at mechanical completion funding, the ECCA will require a Form T-1 Owner's Policy of Title Insurance ("Owner's Policy") as a condition precedent to closing.¹¹ The insured party on the Owner's Policy will be the solar project company, and the tax equity party will be included as an additional insured in a T-26 additional insured endorsement.¹² Including the tax equity party as an additional insured happens at first funding, because the tax equity party is investing into and becomes affiliated with the project company at that point. The tax equity party will also typically request a T-24 non-imputation endorsement to the Owner's Policy at first funding.¹³ The non-imputation endorsement ensures that knowledge held by the project company prior to tax equity funding will not be imputed to the tax equity party, meaning that the tax equity

party will not be denied title coverage under the Owner's Policy for issues the tax equity party was unaware of prior to funding.¹⁴

Other endorsements typically required at first funding and issuance of the Owner's Policy for a Texas solar project include:

- T-4 Leasehold Owner's Policy Endorsement;
- T-23 Access endorsement;
- T-25.1 Contiguity Endorsement;
- T-19.1 Restriction, Encroachments, Minerals – Owner's Policy Endorsement; and
- T-19.2 Minerals and Surface Damage Endorsement.

Following first funding and issuance of the Owner's Policy, the subsequent tax equity phases will usually require a title update that comes in the form of a T-3 date down endorsement. This endorsement updates the Owner's Policy to reflect any new title items that have attached to the property since the last closing, and it allows the parties to review and obtain coverage over those new items prior to final funding.

b. Title Review and Curative

The title review and curative process leading up to a solar tax equity closing can be complex, especially if the project involves lots of land and lots of exceptions in the title work. Attorneys conducting due diligence in preparation for closing will want to confirm that the proper title curatives are in place, or, depending on the stage of financing, that the ECCA requires the proper curative to be in place at the appropriate time. "Curative" is a term used to describe the resolution of a particular title issue in order to obtain the appropriate coverage required for closing, whether that involves a title endorsement (as discussed above), express coverage, or removing the item as an exception from title altogether. Common title exceptions requiring curative analysis and resolution include mineral interests, restrictive easements, prior mortgages, and various other types of liens.

i. Mineral Interests

⁹ *Id.*

¹⁰ See Mashaal Bhaidani, *Common Title and Survey Deliverables in Texas Energy Transactions*, EMERGING ENERGY INSIGHTS (September 28, 2022), <https://www.emergingenergyinsights.com/2022/09/common-title-and-survey-deliverables-in-texas-energy-transactions/>.

¹¹ *Id.*

¹² *Additional Insured Endorsement (Form T-26)*, TEXAS DEPARTMENT OF INSURANCE, <https://www.tdi.texas.gov/title/titlemm2.html> (last visited December 12, 2022).

¹³ Bhaidani, *supra* note 10.

¹⁴ *Non-Imputation Endorsement (T-24)*, TEXAS DEPARTMENT OF INSURANCE, <https://www.tdi.texas.gov/title/titlemm2.html> (last visited December 4, 2022).

Finding mineral interest exceptions over Texas property during title review is not unusual. Typical mineral exceptions include severances or reservations in deed conveyances, as well as oil and gas leases for exploration and production. As discussed above, title policies for Texas solar tax equity transactions usually include T-19 mineral endorsements and express coverage, and title companies have specific requirements for obtaining these coverages. For mineral severances, this includes providing evidence of the waiver of all (or most) of the mineral surface rights over land involved in a solar project. For oil and gas leases, this includes providing evidence that the lease has either expired by its terms and is inactive, or that it has been released.¹⁵ Communicating directly with the title company and understanding what is required for mineral curative is an important part of a solar development attorney's responsibilities leading up to tax equity financing. Ideally at closing, (i) the title company will have approved all requested mineral endorsements, (ii) oil and gas leases will have expired or been released (or, in the alternative, surface rights will have been waived or drill-site reservations will have been established),¹⁶ and (iii) any remaining mineral exceptions in the title work will be included in the express coverage.

ii. Restrictive & Blanket Easements

Restrictive and blanket easements are red-flag title exceptions that can be complex and time consuming to resolve. An easement is restrictive if it limits a landowner's ability to access or build structures over the easement area. An easement is blanket if it is tied to a large portion of property rather than the location of the easement facilities themselves.

Some easements can be either restrictive *or* blanket, or both restrictive *and* blanket. An easement that is both restrictive and blanket is the most problematic of these three scenarios, because it means that the project company cannot build facilities over a large portion of property without negotiating a crossing agreement or consent. The project company cannot necessarily avoid an easement that is both restrictive and blanket when designing the site plan in the same way it could design around a restrictive easement that is only tied to the facilities, like a fifty-foot-wide electrical line easement, for example. Either way, if a project company plans to build solar facilities over a restrictive easement or a restrictive

and blanket easement, a crossing agreement or consent is required.

For blanket easements that are not restrictive, these are not as big of an issue unless the project company plans to cover the blanket easement area with solar panels and other facilities. Covering the blanket easement area in this way – essentially eliminating access to the easement area -- would frustrate the purpose of the easement, and the easement holder would be entitled to force removal of the solar facilities in order to build their easement. Sometimes, blanket easements are only blanket until the facilities are installed, and once built, the easement becomes narrowed to the vicinity of the facilities. In this case, the reviewing attorney should evaluate whether there have been facilities built pursuant to the easement and confirm that the easement is no longer blanket by its terms.

In order to obtain express coverage over restrictive easements in a Texas title policy, the project company will need to provide crossing agreements or consents to the satisfaction of the title company. It is important to coordinate with the title company in the negotiation process with the easement holder. Prior to execution, the real estate attorney should confirm that the form of the crossing agreement or consent is sufficient to obtain the express easement coverage needed, because these agreements can be challenging to obtain, and even more challenging to amend.

iii. Prior Mortgages

The prior mortgage curative process is necessary to de-risk the project from potential foreclosure and forced removal of facilities. In the solar tax equity context, a prior mortgage refers to a loan established prior to the effective date of a solar lease, and which includes all or a portion of the solar project area as collateral under the loan.¹⁷ The title work will reveal any existing mortgages on the property, and the reviewer should confirm whether those mortgages are prior or subsequent in time to the solar lease. When a mortgage is prior in time to a solar lease, it has superiority in the event of foreclosure due to default on the mortgage by the landowner.¹⁸ Prior mortgages may also limit a landowner's right to build structures over the land without prior consent from the mortgage lender.

¹⁵ See Alex McClintic, *Mineral Issues' Impact on Solar Energy Projects*, VOL. 44 NO. 3 SECTION REPORT OF THE OIL, GAS & ENERGY RESOURCES LAW SECTION OF THE STATE BAR OF TEXAS 78, 80 (Sept 2020).

¹⁶ *Id.*

¹⁷ See Tricia Jackson, *Resolving Prior Mortgage Issues on Greenfield Renewable Energy Projects*, EMERGING

ENERGY INSIGHTS (August 4, 2021), <https://www.emergingenergyinsights.com/2021/08/resolving-prior-mortgage-issues-on-greenfield-renewable-energy-projects/#more-3524>.

¹⁸ *Id.*

There are several options for resolving prior mortgages over property, including obtaining a subordination and non-disturbance agreement (“SNDA”). In an SNDA, the prior mortgage lender agrees to subordinate its lien position, acknowledging the solar lease over the project and agreeing not to disturb the project in the event of default on the loan. Alternatively, if the landowner has already paid off a large portion of the mortgage, and/or if there is significantly more land encumbered by the mortgage than the portion included within the solar project area, a project company and landowner could negotiate with the mortgage lender to have the leased land released from the mortgage altogether and have the remaining unleased land continue as collateral on the loan. Lastly, the project company may choose to pay off the mortgage completely and deduct the payoff amount from the landowner’s lease payments until the project company has been reimbursed for the expense.

iv. Other Liens

Prior to ECCA signing, title due diligence might reveal other liens besides prior mortgages on the leased property, like tax liens or court judgment liens. In addition, once construction has begun, real estate attorneys should periodically review the title work for any mechanics or materialmen’s liens that may have been filed in connection with construction of the project. The process for resolving liens will be different depending on the type of lien involved, but ultimately, if a lien shows up in the title work leading up to a solar tax equity closing, the tax equity investor will want to see a valid release of the lien filed and recorded of record and removal of the lien as an exception to the title coverage.

IV. ALTA Survey

An ECCA will typically require an American Land Title Association (“ALTA”) survey of the project as a condition precedent to closing. The ALTA survey will need to be signed and sealed by the surveyor and referenced in the Owner’s Policy issued at closing. Providing the ALTA survey to the title company also allows the title company to remove the general survey exception typically included in Schedule B, Item 2 of the Owner’s Policy.¹⁹ Requirements for the substance of the ALTA survey will differ depending on the phase of the solar transaction. At mechanical completion funding, for example, some, but not all, of the project facilities may be

installed, whereas at substantial completion funding, it is more likely that most or all of the project facilities will be installed. For this reason, it is important to understand the status and progress of construction when negotiating ECCA conditions precedent to closing. The project company should not agree to provide, and the tax equity investor should not expect to receive, a final as-built survey at ECCA signing or at mechanical completion. A more appropriate request would be for a survey that includes site-plan overlays and depictions of any as-built components as of the date of delivery.

During ALTA survey review, the real estate attorney should confirm several items, including: (i) that all of the project land is accounted for in the ALTA survey; (ii) that all of the project facilities are located within the leased property boundary; (iii) that all necessary Table A items and surveyor’s notes are included in the ALTA survey to the tax equity investor’s satisfaction; (iv) that all plottable Schedule B exceptions are depicted and labeled on the ALTA survey; (v) that the ALTA survey reflects the schedules in the Owner’s Policy and references the final form of the title commitment or proforma Owner’s Policy to be issued at closing in the surveyor’s notes; and (vi) that the ALTA survey is certified to all necessary parties.

V. Estoppels

In the renewable energy real estate context, an estoppel is a document signed by a landowner certifying the validity of a lease or easement and to the truth of certain statements regarding the lease or easement. This includes certifications that all payments under the lease or easement are current and that there have been no defaults on the part of the project company.²⁰ Tax equity investors will typically require an estoppel from each landowner who is a party to an ongoing lease or easement agreement as a condition to close. In the alternative, tax equity investors may not require a landowner estoppel for an easement that is not ongoing and for which a one-time fee has been paid (e.g., an exclusive and perpetual transmission line or access road easement). If all obligations to the easement have been met, and the title company has agreed to cover the easement as part of the insured estate for the project, then there would be no need for the landowner to further certify to the validity of the easement via an estoppel.

The lease or easement should indicate how long the landowner has to sign the estoppel once it has been requested by the project company, and the ECCA will

¹⁹ Upon providing the title company with an ALTA survey, the general survey exception can be revised to simply state “shortages in area.”

²⁰ Lisa Chaves, *Financial Renewable Energy Leases (Solar & Wind): Developer’s Perspective*, VOL. 44 NO. 3

indicate how many days within closing the landowner estoppels must be dated. Therefore, the project company will have to properly time its estoppel requests such that enough time is allocated for the landowner to sign and return the estoppel within the timeframe required under the ECCA. If closing gets delayed, it is possible that the project company will have to go back to the landowner to have the estoppel redated, or the tax equity investor could be asked to waive the timing requirement in the ECCA.

V. Conclusion

Real estate due diligence is an important element of utility scale solar tax equity transactions. Attorneys should expect an ECCA to include closing requirements

related to site control, title, survey, and landowner estoppels. However, real estate matters will always vary from project to project. Engaging counsel that understands the scope and complexity of solar development and real estate due diligence and resolving foreseeable real estate issues as far in advance as possible, are important steps toward ensuring that a solar tax equity transaction reaches the finish line.

ECONOMIC AND ENVIRONMENTAL IMPACTS OF RENEWABLE ENERGY AND ENERGY STORAGE IN TEXAS

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Note: this paper summarizes findings from two reports that quantified environmental and economic impacts from wind, solar, and energy storage build-out in Texas' power sector. One report focused specifically on the impacts of wind and solar on wholesale electricity prices¹ and the second geographically examined the cumulative local taxes and landowner payments from wind, solar, and energy storage facilities.²

I. Introduction

Texas is a globally relevant leader in the deployment of renewable energy and energy storage technologies. Texas is fifth in the world for installed wind capacity³ with almost 38,000 MW installed by the end of 2021.⁴ Including capacity installed in 2022 Texas is currently 15th in the world for installed solar capacity with 8,837 MW.⁵ Developers in the state also connected over 1,000 MW of energy storage in the first half of 2022. Analysts, developers, and the grid operator expect the installed capacities for these technologies will continue to grow rapidly. By 2025, it is anticipated that wind could increase to over 47,000 MW, solar to over 42,000 MW, and energy storage to over 10,000 MW.⁶ These projects provide significant benefits for a wide range of Texas stakeholders, including wholesale electricity price reductions, hedges against current and future high and/or volatile natural gas and coal prices, and tax and landowner revenue to local jurisdictions, most of which are located in rural parts of the state.

II. Impact of renewables on wholesale electricity market prices in ERCOT

Renewables affect the average wholesale electricity market price by providing energy at near-zero (or negative) prices due to the absence of fuel costs and the benefit of production or investment tax credits. In electricity markets, this type of bidding behavior leads to lower overall market prices. To test their impact, we ran a simplified model of the Electric Reliability Council of Texas' (ERCOT's) dispatch market with and without existing wind and solar capacity. Since ERCOT supplies 90%⁷ of Texas' load, analysis of the ERCOT market serves as a reasonable proxy for the entire state.

Our analysis shows that renewables have reduced ERCOT wholesale electricity market prices on average by \$1.17/MWh in 2012 and \$20.60/MWh in January – August 2022. We estimate that renewables have reduced ERCOT wholesale market costs between \$480M to \$7.4B per year for a total saving of \$27.8B for 2010 through August 2022.⁸ Further, we estimate that renewables have reduced ERCOT wholesale market costs by approximately \$925M per month from January 2022 through August 2022. The effect has been larger in 2022 because there was more wind and solar generation on the grid and natural gas and coal prices were much higher than in preceding years. If current market conditions persist, wholesale electricity market cost savings are on-track to exceed \$11B for 2022 alone.

III. Renewables as a hedge against high natural gas prices

Natural gas prices have seen significant increases and volatility in recent years due to a variety of factors, including increased LNG (liquefied natural gas) exports from the USA, growing supplies, dynamic weather, the

¹ https://www.ideasmiths.net/wp-content/uploads/2022/10/IdeaSmiths_CFT_ERCOT_RE_FINAL.pdf

² https://www.ideasmiths.net/wp-content/uploads/2020/08/CTEI_PT_TX_renewable_county_analysis_FINAL_20200805.pdf

³ https://en.wikipedia.org/wiki/Wind_power_by_country

⁴ https://www.energy.gov/sites/default/files/2022-08/land_based_wind_market_report_2202.pdf

⁵ https://en.wikipedia.org/wiki/Solar_power_by_country

⁶

<http://mis.ercot.com/misapp/GetReports.do?reportTypeId=15933&reportTitle=GIS+Report&showHTMLView&micKey>

⁷

https://www.ercot.com/files/docs/2022/02/08/ERCOT_Fact_Sheet.pdf

⁸ Complete methodology and results can be found at <https://www.texansforeconomicliberty.com/wp-content/uploads/2022/10/The-Impact-of-Renewables-in-ERCOT.pdf>

Russian invasion of Ukraine and EU Energy Crisis⁹. In several preceding years, natural gas prices had ranged from \$2 - \$4/MMBtu in the United States but rose to over \$9/MMBtu in 2022. These price increases are minimal compared to the price increases experienced in Europe, but are much higher than the US has recently.¹⁰ Further, higher global demand for natural gas might put upward pressure on prices as exports grow and therefore more tightly couple US prices with the global trading hubs, as is the case with domestic oil prices that are affected by global markets. This potential for an era of sustained elevated natural gas prices could trigger higher demand for renewables to serve as a hedge against higher electricity prices.

We examined the impact that renewables have on wholesale electricity markets as the price of natural gas changes to better understand how renewables can mitigate against high and volatile natural gas prices. Using the 2021 version of the simplified ERCOT dispatch model mentioned above as the baseline for modeling and varying the price of natural gas through a range of possibilities, we found that renewables decrease ERCOT average electricity price by between \$10/MWh at a natural gas price of \$2/MMBtu and by as much as \$30/MWh at natural gas prices of \$12/MMBtu. These results indicate that renewables in ERCOT provide a price hedge against the volatility of natural gas prices while also reducing overall prices.

IV. Environmental impacts of renewables in ERCOT

In addition to monetary benefits through reduced wholesale electricity market prices, renewables in ERCOT have also yielded significant local and global environmental benefits. These environmental benefits take the form of reduced water consumption for electric generation and reduced emissions¹¹ of SO₂, NO_x, and CO₂ because renewables do not consume cooling water or produce emissions at the point of generation. Since it is not unusual for a significant portion of Texas to be in a state of

drought¹² and with many surface water sources already fully allocated, increasing the use of renewables, which don't require water to produce electricity, can reduce water competition and ease ecosystem strain. Additionally, reducing air pollution yields significant health benefits for Texans through reduced respiratory risks.

Using the same methodology as above, we estimate that if there had been no solar or wind generation in ERCOT between 2010 – August 2022, the power sector would have withdrawn 8 trillion more gallons of water¹³, consumed 244 billion more gallons of water¹⁴, emitted 416 thousand tons more SO₂, emitted 318 thousand tons more NO_x, and emitted 558 million tons more CO₂. Based on a range of reasonable estimates for water and emission costs¹⁵, these water withdrawals and emissions would have induced between \$10.5 billion and \$77.3 billion in additional environmental and public health costs over this time period.

V. County tax revenue from renewables and energy storage in Texas

Renewable and energy storage projects can be a major source of revenue for counties and schools, especially for rural counties that generally have a smaller industrial base and population than others. We used publicly available Chapter 313¹⁶ filings from the Texas Comptroller's website, which provide tax schedules for projects, as the basis for developing a systematic methodology to estimate the levelized (per unit size) tax revenue that a county might expect to receive for a wind or solar project. Because energy storage projects have never qualified for the same tax abatements and their tax schedules are not public, we relied on industry-provided data to estimate their tax payments. Using this methodology, we estimate that a county in Texas could expect to receive \$9.4 - \$13.1 million in lifetime taxes (including school taxes) for a 100 MW solar project, \$16.8 - \$20.3 million for a 100 MW wind project, and \$3.8 - \$4.7 million for a 100 MW energy storage project.¹⁷

⁹ <https://www.eia.gov/todayinenergy/detail.php?id=53579>

¹⁰ <https://www.eia.gov/todayinenergy/detail.php?id=51358#:~:text=The%20TTF%20price%20peaked%20at,MMBtu%20from%202014%20through%202018.>

¹¹ Note that there are other emissions benefits realized by not burning additional fossil fuels, but we focused on the major ones for this work.

¹² <https://droughtmonitor.unl.edu/CurrentMap/StateDroughtMonitor.aspx?TX>

¹³ Water withdrawals refer to water that used by a power plant for cooling but returned to a watershed

¹⁴ Water consumption refers to water that is consumed (evaporated) by a power plant's cooling system and is not available for other uses

¹⁵ Joshua D. Rhodes, Carey King, Gürcan Gulen, Sheila M. Olmstead, James S. Dyer, Robert E. Hebner, Fred C. Beach, Thomas F. Edgar, Michael E. Webber, "A geographically resolved method to estimate levelized power plant costs with environmental externalities," *Energy Policy*, Volume 102, 2017, Pages 491-499, ISSN 0301-4215, <https://doi.org/10.1016/j.enpol.2016.12.025>.

¹⁶ Tax abatements available to large commercial projects of many types in Texas.

¹⁷ Note that these values do not include Payments in Lieu of Taxes (PILOT) payments that are sometimes also paid

This analysis was extended to consider the county tax revenue for all existing solar, wind, and energy storage projects in Texas as well as all projects currently with interconnection agreements.¹⁸ We found that the existing wind, solar, and energy storage fleet in Texas will pay \$7.2 - \$8.8 billion in taxes over their lifetime. Further, if all projects with interconnection agreements are built, existing and planned wind, solar, and energy storage projects will pay \$12.5 - \$15.9 billion in lifetime taxes. Of these taxes, over 60% would go to rural counties.¹⁹

VI. Landowner payments from renewables and energy storage in Texas

A second stream of payments from renewable energy projects are those made directly to the landowner for leasing their land to project developers. The contracts themselves for these payments are not public, complicating the estimation of potential benefits from this stream. Payment values can vary depending on property location, as some properties have higher opportunity costs than others. For example, good farmland located close to population centers will often garner a higher lease value for agricultural operations than marginal scrubland located farther away. The renewable energy production profiles and estimated resource potential also causes variation in property lease values as some locations have higher quality resources. This phenomenon is especially true for wind energy. For example, wind farms in South and Coastal Texas often have higher landowner payments because they generally produce more energy during times of higher grid electricity prices than wind farms in North and West Texas.

Due to a lack of publicly available data, landowner payments were estimated using information received from developers and energy law firms that often represent landowners in renewable energy development contracts. For solar photovoltaics (PV) and energy storage, landowner contracts are usually based simply on the amount of acreage utilized and paid on a \$/acre-year basis,

directly to local jurisdictions and thus could be an underestimation of the total payments that some projects make.

¹⁸ An Interconnection Agreement; can include either of the following, 1) the Standard Generation Interconnection Agreement (SGIA), 2) a Public financially binding agreement, or 3) an official letter from a Municipally Owned Utility (MOU) or Electric Cooperative (EC) signifying developer intent to build and operate generation facilities and interconnect with the MOU or EC

¹⁹ While there is no official definition of a rural county, this analysis defined counties with a population density

similar to other forms of land leasing, such as animal grazing.

With wind projects, the land is often available for other uses (such as farming and cattle) when construction is complete. As a result, the landowner payment contracts for wind are more complex and are often based on the amount of physical infrastructure left in the ground, such as the number of turbines, transmission right-of-way, or length of roads, etc.

We estimate that a landowner in West Texas could expect to collect \$16.2 - \$24 million in lifetime landowner payments for a 100 MW wind farm, depending on the length of the contract.²⁰ The same size wind farm located in South or Coastal Texas²¹ could provide \$22.8 - \$33 million in landowner payments over its lifetime. For a 100 MW solar farm, a landowner in the North, West, Far West, and Panhandle regions could expect \$5.2 - \$15.8 million in lifetime payments. In the East, South, and North Central, and South Central regions of Texas, landowners can expect \$9 - \$23.8 million in lifetime payments for a 100 MW solar farm and landowners in the Coastal region could expect \$10.3 - \$27.7 million. Leases for energy storage could yield \$260,000 - \$1.2 million in lifetime payments per 100 MW of installed storage. Energy storage projects have shorter lifetimes and take up much less land per MW of capacity than wind and solar.

Considering all the existing solar, wind, and energy storage installed in the state, we estimate that these projects will pay Texas landowners \$7.1 - \$11.3 billion over their lifetimes. If all expected projects are built²², we estimate an additional \$4.7 - \$10.4 billion in payments, for a total of \$11.8 - \$21.7 billion in lifetime payments to Texas landowners. As renewable energy and energy storage projects continue being built in the state through 2025 and beyond, these payments and benefits will continue to grow.

VII. The Chapter 313 program

less than the Texas median (about 22 persons per square mile) as rural.

²⁰ Based on a lease length of 25 to 35 years. Some leases are longer, up to 50 years. However, as those contracts are not public and older wind farms are often being repowered with newer technology, potentially introducing new contract terms, it was not possible to estimate the length of any landowner contract. Thus, a shorter range of times were chosen for the estimated range.

²¹ See original report for a map of regions.

²² Projects with signed interconnection agreements

Part of this analysis leaned heavily on the data available from the Chapter 313 program. This program's future is uncertain. The Texas Economic Development Act (Chapter 313) was implemented in 2001 to help Texas attract capital intensive projects to the state by providing a local-option, ad valorem (property tax) value limitation for a temporary period. In 2021, the Texas Legislature did not renew the Chapter 313 program and it is scheduled to expire on December 31, 2022. Because projects that applied for and are granted Chapter 313 value limitations prior to the program's expiration are eligible to access those benefits even after the expiration date, the economic impacts forecasted in this study contemplate the use of Chapter 313 benefits, but readers should not assume that the program's benefits will be realized in future years. ***Without the Chapter 313 exemptions, the tax revenues would be even higher for a 100 MW project than what this analysis concludes.***

It is possible that the program or something similar will be revived or enacted in future legislative sessions²³. If the program is not renewed, capital-intensive projects, such as wind and solar farms, LNG export terminals and manufacturing plants would pay more in taxes. It might also mean that fewer projects locate in the state. Because of its reliance on higher *ad valorem* taxes for a large portion of its tax revenue, without some type of limitation program Texas has a competitive disadvantage when compared with neighboring states which often have lower ad valorem tax rates. Many other states also offer tax reductions, exemptions, and incentives to attract capital investments.

VIII. Conclusions

This analysis indicates that wind, solar, and energy storage projects have provided and continue to provide positive economic benefits for various stakeholders across Texas, including electricity customers, landowners, and county governments. Renewables have reduced ERCOT wholesale electricity prices by nearly \$28 billion since 2010. They have also reduced the water intensity and pollutant emissions associated with power generation in ERCOT. As natural gas and coal prices rise, renewable's impact on wholesale electricity market prices acts as a hedge against possible higher prices in the future. Considering both economic and environmental benefits between 2010 and August 2022, we estimate that wind and solar provided between \$38.7 billion and \$106 billion in total benefits to Texas residents within the ERCOT service territory.

Renewable energy and energy storage development have, similarly, had positive economic impact in Texas in the form of county taxes and landowner payments. These benefits are particularly impactful in rural counties, which are likely to receive more than 60% of the estimated tens of billions in tax revenue and landowner payments that come with existing and planned wind, solar, and energy storage development.

²³ <https://www.texastribune.org/2022/08/05/texas-dade-phelan-chapter-313/>

RENEWABLE ENERGY CASE LAW UPDATE – TEXAS

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This case law update describes a selection of renewable energy cases decided in Texas state and federal courts during the timeframe of late 2020 through late 2022.

I. SOLAR ENERGY

Lyle v. Midway Solar, LLC, 618 S.W.3d 857 (Tex. App.—El Paso 2020, pet. denied)

Renewable Energy Leases – Title Examination/Accommodation Doctrine

The El Paso Court of Appeals begins its *Lyle* opinion reflecting on Texas’s reputation as “a leader in energy.”¹ Acknowledging the dispute’s place in the context of competing policy issues, Chief Justice Jeff Ally writes:

Undeniably, Texas produces the nation’s largest share of oil and gas. At the same time, its public policy favors adding renewable energy sources into the State’s energy portfolio. The central issue in this case raises the potential conflict between the operation of a large-scale solar facility and the owners of the mineral interests on the land where the solar array sits.²

The *Lyle* case concerns a dispute between a solar developer, Midway, and mineral owners, the Lyles. Midway developed a 315-acre tract in Pecos County under a 55-year solar development lease with the surface owners. Neither Midway, nor the surface owners, owned the land’s underlying minerals; neither did they possess surface-use agreements or waivers from all the mineral owners.³

Without soliciting any mineral owner’s input, Midway designated the perimeter of the solar project as an undevelopable area reserved for oil and gas surface operations. Upon completion of construction, Midway’s

solar facility, covering about 70% of the surface tract, was completely fenced with no public access.⁴



The Lyles sued the surface owners and Midway for damages to the mineral estate, claiming trespass, breach of contract, and impairment of the mineral estate in violation of the “accommodation doctrine.” They also sought a permanent injunction for removal of the panels and transmission lines that were allegedly encroaching on their mineral interests and easement rights.⁵

The parties filed battling motions for summary judgment. Following a series of rulings, the trial court ultimately disposed of and rejected all the Lyles’ claims and entered a final, take-nothing judgment against the Lyles.⁶

On appeal, the court of appeals examined a 1948 Deed reserving the minerals, which specified:

Grantors further reserve unto themselves, their heirs and assigns, the right to such use of the surface estate in

¹ *Lyle*, 618 S.W.3d at 862.

² *Id.* (footnotes omitted).

³ *Id.* at 862–64. Midway had obtained waiver agreements from twenty individuals who owned mineral interests on adjoining property. The waiver agreements purported to give those individuals rights to use the premises for mineral exploration and to give Midway “unfettered access and use

of the surface.” *Id.* at 864. After the Lyles filed suit, Midway filed a “Disclaimer of Interest” stating that the wavier agreements did not “grant, convey, or transfer” any rights, title or interest to the Lyles’ mineral estate. *Id.*

⁴ *Id.*

⁵ *Id.* at 864–65.

⁶ *Id.* at 867.

the lands above described as may be *usual, necessary, or convenient* in the use and enjoyment of the oil, gas, and general mineral estate hereinabove reserved.⁷

The Lyles argued in their appeal that the deed's language grants broader rights than those implied rights typically flowing with a bare mineral reservation. Thus, the Lyles asserted that the deed precludes application of the accommodation doctrine because "usual" meant vertical wells at the time of the reservation. The Lyles maintained that: (i) the deed granted the mineral owners the express right to drill vertical wells, and (ii) the solar facility deprived the owners of the opportunity to pursue exploration. The Lyles' experts provided evidence that the solar facility "severely" impacted the mineral owners' ability to develop minerals and was a "significant deterrent" to development.⁸ These experts also testified that: (i) mineral development would be economically viable; (ii) the best area to develop was covered by the solar facility; (iii) geography hinders a potential operator's ability to develop the minerals with horizontal wells (as there were none within 20 miles); and (iv) other wells in the area were all vertical.⁹

The El Paso Court of Appeals held that the deed did not preclude application of the accommodation doctrine.¹⁰ It reasoned that the terms "necessary" and "convenient" are too imprecise to preclude its application; further, the court observed that the deed uses "usual" in a general sense—"usual" does not specifically contemplate certain drilling techniques. This language, according to the court, created "room for substantial disagreement" as to the parties' intent—thereby mandating application of the accommodation doctrine.¹¹

The court of appeals therefore affirmed the summary judgment in favor of Midway against the Lyles, holding that unless and until the mineral owners attempted to develop their mineral estate, the accommodation doctrine did not operate to inhibit the use of the surface estate.¹² Accordingly, the court of appeals ruled that under the facts

and evidence before it, the Lyles' claims were premature until the mineral owner actually attempted to develop the minerals. Therefore, the trial court's judgment was reformed to be without prejudice.¹³

Martin v. Hopkins Cty., No. 06-22-00022-CV, 2022 WL 16952888 (Tex. App.—Texarkana Nov. 16, 2022, no pet. h.)

Tax Abatement Incentives

The main issue this case presented was whether Hopkins County properly employed Texas Local Government Code section 381.004 to provides tax incentives aimed at attracting Hopkins Energy, LLC, which sought to build a solar power plant in the County while providing advertised community benefits, such as local tax revenue, permanent jobs, and "community support via substantial charitable contributions."¹⁴ After years of discussions, in November 2021 the County entered into a private agreement with Hopkins Energy (Agreement).

Thereafter, Plaintiff Cynthia Martin raised *ultra vires* claims against Hopkins County officials concerning the Agreement.¹⁵ Martin alleged that the Agreement offered tax-abatement incentives under Texas Local Government Code section 381.004(g)¹⁶—not loans or grants under subsection (h).¹⁷ Consequently, Martin maintained that the Agreement failed to comply with the Texas Tax Code—a subsection (g) requirement. Martin sought injunctive relief and a declaratory judgment that the County officials lacked legal authority to act under the Agreement or "to reimburse any ad valorem taxes collected from" Hopkins Energy. In response, the County and the officials moved for summary judgment, contending that they made the Agreement under subsection (h), which did not require the Agreement to be governed by statute, specifically including the Texas Tax Code.¹⁸

The Texarkana Court of Appeals affirmed the trial court's summary judgment and concluded that the Agreement was for a grant, not a tax abatement, because it

⁷ *Id.* at 870 (emphasis in original).

⁸ *Id.* at 866.

⁹ *Id.* at 866–67.

¹⁰ *Id.* at 868.

¹¹ *Id.* at 870–71.

¹² *Id.* at 874–75.

¹³ *Id.*

¹⁴ *Martin*, 2022 WL 16952888, at *1.

¹⁵ *Id.* at *2.

¹⁶ "The commissioners court may develop and administer a program ... for entering into a tax abatement agreement with an owner or lessee of a property interest subject to ad

valorem taxation. The execution, duration, and other terms of the agreement are governed, to the extent practicable, by the provisions of Sections 312.204, 312.205, and 312.211, Tax Code, as if the commissioners court were a governing body of a municipality." TEX. LOC. GOV'T CODE § 381.004(g).

¹⁷ "The commissioners court may develop and administer a program ... for making loans and grants of public money and providing personnel and services of the county." *Id.* § 381.004(h).

¹⁸ *Martin*, 2022 WL 16952888, at *2.

established both that Hopkins Energy was required to pay the full amount of ad valorem taxes due each year and that it was not entitled to any grant or reimbursement unless it made such payments and met other obligations, including maintaining two full-time equivalent employment positions. Thus, “the Agreement specified a grant of public funds incentive, not a tax abatement incentive.”¹⁹ The court of appeals ultimately agreed that the County and Hopkins Energy formed their Agreement under subchapter (h), and it affirmed the summary judgment against Martin on her *ultra vires* claims against the County officials—all of which were based on purported Tax Code violations.²⁰

City of Georgetown v. Putnam, 646 S.W.3d 61 (Tex. App.—El Paso 2022, pet. filed)

Public Information Requests Concerning Renewable Energy Projects

Terrill Putnam, a resident of the City of Georgetown, harbored concerns “about the investments the City has been making in renewable resources over the past few years.”²¹ Putnam made a request of the City under the Texas Public Information Act (TPIA) to obtain a specific document—a “payback analysis”—relevant to the City’s installation of solar panels on a public building. This document listed, among other things, the rates at which the City could purchase electric power from solar power providers and the amount of energy each could generate at that rate.²² When the City denied his request, Putnam sued the City, its mayor and its city manager, seeking declarations pursuant to the TPIA and the Texas Uniform Declaratory Judgments Act (UDJA) that the payback analysis was not excepted from disclosure under the TPIA and an injunction to compel its disclosure. The City initially resisted disclosure, but after recognizing that the document had been placed on its public website, voluntarily released it to Putnam, stating that it was still maintaining its legal position that the payback analysis was not subject to disclosure.²³

Putnam amended his Petition to eliminate the request for injunctive relief; but he continued to pursue a declaration that the payback analysis was public information and to seek recovery of his attorney’s fees. The City filed a plea to the jurisdiction contending Putnam lacked a valid claim for relief and that, in any event, release of the document rendered Putnam’s claims moot.²⁴ Putnam likewise moved for summary judgment, arguing that the case presented a “live controversy” because the City was

maintaining its position that the payback analysis was confidential and exempted under the TPIA.²⁵

The trial court denied the plea to the jurisdiction and granted Putnam summary judgment, declaring that the competitive-matters-exception to the TPIA did not except the payback analysis from disclosure and awarding Putnam an undetermined amount of attorney’s fees. The City filed an interlocutory appeal from the order under Texas Civil Practice & Remedies Code section 51.014(a)(8).²⁶

The El Paso Court of Appeals concluded that even if Putnam had valid claims under the TPIA or the UDJA, the City’s voluntary release of the payback analysis rendered them moot, depriving the trial court of subject matter jurisdiction. Further, the court of appeals concluded that the TPIA competitive-matters-exception and capable-of-evading-review exception did not apply to Putnam’s claims and Putnam was not entitled to an award of costs under either the TPIA or the UDJA.²⁷

On May 9, 2022, Putnam filed a Petition for Review in the Texas Supreme Court. Following the filing of the City’s response and Putnam’s reply, the Texas Supreme Court requested that the parties file a briefing on the merits. In September 2022, several members of the Texas Legislature filed an *amicus* brief asserting that the City of Georgetown’s practice of rejecting legitimate information requests under the TPIA and then disclosing them after the City was sued is an “improper and potentially illegal use of the TPIA.” At present, Putnam has filed his brief; the City’s brief is due December 21, 2022. More information can be found on the Texas Supreme Court’s website: <https://search.txcourts.gov/Case.aspx?cn=22-0375&coa=cossup>.

II. WIND ENERGY

Ellis v. Wildcat Creek Wind Farm LLC, No. 02-20-00050-CV, 2021 WL 1134416 (Tex. App.—Fort Worth, Mar. 25, 2021, no pet.)

Standing - Diminution in Property Values Near Wind Farms

A group of property owners in Cooke County (Property Owners) sued Wildcat Creek and a group of Cooke County governmental officials challenging a resolution that created a reinvestment zone—“a

¹⁹ *Id.* at *7 (footnote omitted).

²⁰ *Id.* at *9.

²¹ *Putnam*, 646 S.W.3d at 65.

²² *Id.*

²³ *Id.* at 66.

²⁴ *Id.*

²⁵ *Id.* at 66–67.

²⁶ *Id.* at 67.

²⁷ *Id.* at 72–77.

preliminary step in creating tax incentives” for Wildcat Creek to build a wind power plant or “wind farm” in Cooke County.²⁸ The Property Owners’ action challenged: (i) certain County officials’ alleged breach of conflicts of interest rules; and (ii) the alleged failures of Cooke County Commissioners Court (CCCC) relating to required statutory findings concerning the resolution the CCCC passed to create the reinvestment zone. The Property Owners alleged that they suffered damage to their property values because of the anticipated construction of the wind farm and brought claims for inverse condemnation, unjust enrichment, and regulatory estoppel. They sought mandamus as well as declaratory and injunctive relief.

In response, the County defendants filed a plea to the jurisdiction contending that the Property Owners lacked standing and their claims were unripe, seeking dismissal as baseless causes of action under Rule 91a of the Texas Rules of Civil Procedure.²⁹ The trial court granted the plea to the jurisdiction as to the unjust enrichment and regulatory estoppel claims, but denied the plea to the jurisdiction as to the mandamus and inverse condemnation claims. The trial court also denied the Property Owners’ claims for injunctive relief and dismissed the inverse condemnation claim without prejudice.

On appeal, the Fort Worth Court of Appeals vacated the judgment and dismissed the entire case for want of jurisdiction, explaining that “at root, [the Property Owners’] harm appears to have little to do with Appellees’ challenged actions (a prelude to the creation of tax incentives) and more to do with contingent future events that may never come to pass (the eventual construction of a wind farm).”³⁰ The Property Owners failed to demonstrate “a particularized, concrete injury that stands distinct from the generalized harm to the public at large.”³¹ Assuming, without deciding, that diminution of property value may be sufficiently particularized to establish injury-in-fact for purposes of standing, the court of appeals concluded that the Property Owners’ claims suffered from a lack of ripeness:

[T]heir harm is nonetheless wholly dependent on whether or not a wind farm is eventually constructed; they do not dispute that if the wind farm is never built, their property values will ultimately remain intact. Thus, while their claims nominally concern the County Defendants’ actions, their harm

rests almost entirely on future events that at this stage are contingent, hypothetical, and remote. From a ripeness perspective, all that has actually occurred—or will imminently occur—is a prelude: the designation of a reinvestment zone. But even though CCCC has passed the resolution to designate the reinvestment zone, will Wildcat and CCCC eventually enter a tax abatement agreement? And if they enter an abatement agreement, will the abatement lead Wildcat to construct a wind farm that, in turn, would seal the fate of the Property Owners’ property values? Based on this record, it is impossible to tell. Thus, the Property Owners’ constitutional harm rests on eventualities that may never be realized.³²

The court of appeals also observed that the Property Owners’ claims failed when considering the second component of standing, “which asks whether the plaintiff’s injury is fairly traceable to the defendant’s conduct in the sense of causation.”³³ The Property Owners’ indirect harm “lies at the end of a lengthy causative chain” with flawed links.³⁴ The appellate court therefore vacated the trial court’s judgment for want of jurisdiction and dismissed the case.³⁵

Papalote Creek II, L.L.C. v. Lower Colorado River Auth. (Papalote III), No. 19-50850, 2021 WL 3026857 (5th Cir. July 16, 2021, no cert.) (per curiam)

Breach of Contract

This case concerns a 2009 long-term Power Purchase Agreement (Agreement) between the Lower Colorado River Authority (LCRA) and Papalote, whereby the LCRA agreed to purchase Papalote’s entire output of wind energy from Papalote’s 87-turbine wind farm with an obligation to purchase the entire output of wind energy at a set contractual price even if the market price were to fall below the set price.³⁶

Following a drop in energy prices, LCRA informed Papalote in 2015 that it was initiating arbitration to determine its limitation of liability protections under the Agreement and the impact on LCRA’s performance obligations.³⁷ In 2016, the LCRA notified Papalote it

²⁸ *Ellis*, 2021 WL 1134416, at *1.

²⁹ *Id.* at *2.

³⁰ *Id.* at *1.

³¹ *Id.* at *4.

³² *Id.* at *5 (internal citations omitted).

³³ *Id.* at *6 (citation omitted).

³⁴ *Id.*

³⁵ *Id.* at *8.

³⁶ *Papalote III*, 2021 WL 3026857, at *1.

³⁷ *Id.* at *1–2.

would cease taking energy under the Agreement, contending that its aggregate liability was capped at \$60 million.

LCRA had successfully moved in the United States District Court, Western District of Texas, Austin Division (Western District) to compel arbitration, but on appeal the Fifth Circuit Court of Appeals vacated the judgment, concluding the dispute was not yet ripe because LCRA was still purchasing energy from the wind farm when the Western District issued its decision.³⁸ After ending its purchases under the Agreement, LCRA again pursued federal court relief in the Western District and obtained an order compelling arbitration—which the Fifth Circuit reversed and remanded, concluding that the Agreement’s arbitration clause did not cover disputes concerning the interpretation of contractual provisions.³⁹

On remand, United States District Judge Sam Sparks (of the Western District)) granted LCRA summary judgment, ruling that the Agreement unambiguously imposed a \$60 million cap on aggregate damages that LCRA must pay for a breach of the contract.⁴⁰

On the appeal of that ruling, a divided Fifth Circuit panel affirmed the Western District’s judgment in a *per curiam* opinion, primarily focusing on a provision that limited damages for certain failures, specifically: “Buyer’s damages for failure to perform its material obligations under this Agreement shall likewise be limited in the aggregate to sixty million dollars (\$60,000,000).”⁴¹

The Fifth Circuit majority disagreed that the provision limited the damages that LCRA would receive only if Papalote breached the agreement, concluding instead that, in context, the entire phrase explicitly capped the damages LCRA would owe Papalote. The majority likewise rejected Papalote’s argument that the cap applied to LCRA’s termination payment but did not restrict liquidated damages, declining to “rewrite the last sentence ... to impose the narrower liability limitation that Papalote would prefer.”⁴² Finally, the majority rejected Papalote’s argument that liquidated damages LCRA had voluntarily paid since refusing to purchase the wind farm’s energy did not count toward the \$60 million limit. The Fifth Circuit concluded that the payments fell under the cap because they are damages triggered by LCRA’s failure to perform material obligations to accept and pay for energy from the wind farm.⁴³

³⁸ See *Lower Colo. River Auth. v. Papalote Creek II, L.L.C.*, (Papalote I), 858 F.3d 916 (5th Cir. 2017).

³⁹ See *Papalote Creek II, L.L.C. v. Lower Colo. River Auth.*, (Papalote II), 918 F.3d 450 (5th Cir. 2019).

⁴⁰ *Papalote III*, 2021 WL 30268547, *2.

⁴¹ *Id.* at *3–4.

Judge Jennifer Walker Elrod wrote separately in dissent, observing that LCRA’s payments constituted contract performance, not termination, and concluding that the Agreement did not cap the damages LCRA owed Papalote. The majority’s reading of the Agreement, she wrote, “materially alters the purchase contract in a way that makes no sense”: “Papalote expended hundreds of millions of dollars to construct a massive windfarm, and yet LCRA can buy its way out for \$60 million?” In her view, the Agreement “requires LCRA to either take the full output or pay a penalty of liquidated damages on the difference.”⁴⁴ Yet, “the majority gives LCRA a \$60-million option to back out of the contract at any time, for any reason.”⁴⁵

Canadian Breaks, LLC v. JPMorgan Chase Bank, N.A., No. 2:21-CV-37-M-BR, 2022 WL 1131172 (N.D. Tex. Mar. 28, 2022), report and recommendation adopted, No. 2:21-CV-37-M-BR, 2022 WL 1128722 (N.D. Tex. Apr. 15, 2022)

Breach of Contract, Force Majeure, Winter Storm Uri

Canadian Breaks, owner and operator of a wind farm in the Texas panhandle (Wind Farm), entered into a “hedge” contract (Agreement) with JPMorgan under which, for the period of January 1, 2020, through December 31, 2031, Canadian Breaks was to sell to JPMorgan daily fixed quantities of electricity at a fixed price. The Agreement consisted of a series of documents governed by the “International Swaps and Derivatives Association Master Agreement,” which has a “Force Majeure” provision and is governed by New York law.⁴⁶

During February 2021’s “Winter Storm Uri,” Canadian Breaks’ wind turbines were rendered inoperable for prolonged periods because of icing and mechanical issues, including with the turbine’s generators, which were unresolvable in the frozen conditions. These conditions caused the Wind Farm to involuntarily stop or limit electricity generation for several days. Canadian Breaks contended that the wind’s failure “to blow anywhere near its historic trends” also affected the Wind Farm’s electricity generation.⁴⁷

On February 12, 2021, Texas Governor Greg Abbott issued a Declaration of a State of Disaster concerning the storm for all Texas counties. On February 14, 2021, Canadian Breaks notified JPMorgan of a force majeure

⁴² *Id.* at *5.

⁴³ *Id.* at *6.

⁴⁴ *Id.* at *6 (Elrod, J., dissenting).

⁴⁵ *Id.* at *6–7.

⁴⁶ *Canadian Breaks*, 2022 WL 1141172, at *1.

⁴⁷ *Id.*

event under the Agreement, and its continued occurrence. JPMorgan responded by rejecting the claim of a force majeure event, and later invoiced Canadian Breaks for replacement of the electricity JPMorgan bought from the Energy Reliability Council of Texas (ERCOT) open market, totaling \$71,863,420.87 as of Canadian Breaks' filing of a declaratory judgment in the United States District Court, Northern District of Texas.⁴⁸

JPMorgan filed its answer with affirmative defenses and counterclaims. It also filed a motion for judgment on the pleadings under Federal Rule of Civil Procedure 12(c).⁴⁹ In part, JPMorgan sought a ruling that force majeure did not excuse Canadian Breaks' nonperformance.

The District Court first noted that a "force majeure event is an event beyond the control of the parties which prevents performance under a contract and may excuse non-performance."⁵⁰ Turning to the force majeure clause in the Agreement, the court found "material facts in dispute," which prevented it from concluding on the pleadings and judicially noticed facts alone whether Winter Storm Uri constituted a force majeure event under the Agreement.⁵¹

In particular, Canadian Breaks argued that the court "can and should consider the totality of circumstances" that prevented the Wind Farm from performing, which included "unprecedented shortages of energy," imposition of rolling blackouts to manage supply, "unprecedented operational constraints," and significant market dysfunction. For its part, JP Morgan admitted that the Texas energy market faced decreased supply and increased demand, and that ERCOT set prices as high as \$9,000/MWh, but it conceded it lacked sufficient knowledge or information to admit or deny Canadian Breaks' remaining allegations.⁵²

In denying the parties' dueling motions seeking a declaration of an occurrence/non-occurrence of a force majeure, the court found that, "at a minimum, an issue of fact exists as to whether, given all the circumstances surrounding the ERCOT market during Winter Storm Uri, Canadian Breaks was able to purchase the energy it needed to meet its contractual obligations to JPMorgan."⁵³ This fact issue further precluded the court from determining JPMorgan's related 12(c) question concerning Canadian Breaks' alleged breach of contract.⁵⁴

⁴⁸ *Id.* at *1–2.

⁴⁹ *Id.* at *2–3.

⁵⁰ *Id.* at *3 (citing *Aukema v. Chesapeake Appalachia, LLC*, 904 F. Supp. 2d 199, 204–05 (N.D.N.Y. 2012)).

⁵¹ *Id.* at *4.

⁵² *Id.*

⁵³ *Id.* at *5.

⁵⁴ *Id.*

REACTIVE POWER COMPENSATION FOR RENEWABLE ENERGY FACILITIES: OPPORTUNITY AMIDST CHANGE

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Reactive power provides synchronous and non-synchronous generators, as well as other forms of non-generation resources capable of providing reactive power, with a potential additional revenue stream. The provision of voltage support to the grid is an ancillary service, compensated in various ways in the various wholesale electricity markets. Renewable developers should familiarize themselves with the opportunities provided by reactive power compensation, even as some of the compensation models may be shifting.

In 2016, the Federal Energy Regulatory Commission (“FERC”) began allowing wind and solar facilities to offer reactive power as an ancillary service into wholesale electricity markets. Over the past few years, FERC and the independent system operators (“ISOs”) and regional transmission organizations (“RTOs”) began to revisit reactive power compensation models and, as a result, there has been a greater focus on reactive power issues in 2022. This article reviews the current status of reactive power compensation in various U.S. regions, as well as possible future changes.

Significantly, inverter-based resources and storage assets are eligible to receive compensation for reactive power produced in most—though not all—markets. While FERC has permitted wide variation in compensation models in the name of “regional differences,” some of the models may be unjust and unreasonable by failing to adequately compensate all types of generation and non-generation resources for providing reactive power (measured in volt-amperes reactive, or “VAR” and sometimes expressed as megavolt-amperes reactive or “MVAR”).

¹ *Reactive Power Capability Compensation*, Notice of Inquiry, 177 FERC ¶ 61,118 at P 4 (2021) (“Reactive NOI”).

² *Promoting Wholesale Competition Through Open Access Non-Discriminatory Transmission Services by Public Utilities; Recovery of Stranded Costs by Public Utilities and Transmitting Utilities*, Order No. 888, FERC Stats. & Regs. ¶ 31,036 at 31,706-07 (1996), *order on reh’g*, Order No. 888-A, FERC Stats. & Regs. ¶ 31,048, *order on reh’g*, Order No. 888-B, 81 FERC ¶ 61,248

I. Background

Reactive power is an ancillary services product that maintains the stability of the electric transmission grid by providing voltage support. As FERC explained:

Reactive power is a critical component of operating an alternating current (AC) electricity system and is required to control system voltage within appropriate ranges for efficient and reliable operation of the transmission system. At times generators or other resources must either supply or consume reactive power for the transmission system to maintain voltage levels required to reliably supply electricity from generation to load.¹

A. FERC Orders

Nearly three decades ago, FERC recognized that reactive power service could be obtained in one of two ways: (1) by installing facilities as part of the transmission system, or (2) relying on generators. As such, FERC included reactive power purchased from generation resources in Order No. 888 as one of the six ancillary services that transmission owners must include in an open access transmission tariff,² and established power factor requirements in interconnection agreements.

In 2003, FERC clarified that if a transmission owner pays its own generation for reactive power, it must also pay interconnected generators for reactive power.³

(1997), *order on reh’g*, Order No. 888-C, 82 FERC ¶ 61,046 (1998), *aff’d in relevant part sub nom. Transmission Access Policy Study Group v. FERC*, 225 F.3d 667 (D.C. Cir. 2000), *aff’d sub nom. New York v. FERC*, 535 U.S. 1 (2002) (“Order No. 888”).

³ *See Standardization of Generator Interconnection Agreements and Procedures*, Order No. 2003, FERC Stats. & Regs. ¶ 31,146, at P 546 (2003), *order on reh’g*, Order No. 2003-A, FERC Stats. & Regs. ¶ 31,160 (2004), *order on reh’g*, Order No. 2003-B, FERC Stats. & Regs. ¶

This finding kicked off a series of proceedings to determine the just and reasonable rate for reactive power services provided by interconnected generation.

In 2016, FERC eliminated the exemption for non-synchronous generators from the requirement to provide reactive power.⁴ As such, non-synchronous generators became required to provide reactive power, but also became eligible to receive compensation for that power.

Most recently, in November 2021, FERC issued the Reactive NOI, requesting industry input on a list of questions regarding the current state of reactive power compensation in wholesale electricity markets, as well as what the most just and reasonable approach may be for different types of resources. The Reactive NOI is discussed in greater depth below.

B. FERC Staff Reports

Following the August 2003 blackout in New York, the Joint US-Canada task force reviewing the causes found that “insufficient reactive power was an issue in the blackout.”⁵ Chairman Pat Wood convened a task force to develop “principles for efficient and reliable reactive power supply and consumption,” which resulted in a report from FERC Staff outlining the current status of reactive power supply and policies, plus suggestions for change.⁶ In 2010, FERC Staff issued a report on the status of reactive power compensation in the organized and bilateral wholesale electricity markets.⁷ The report found that a wide variety of compensation methods exists, ranging from treating reactive power as an uncompensated service to fixing a stated rate in the tariff to the so-called AEP Methodology.⁸ Under a compensation method that fixes a stated rate in the tariff, the generator is compensated at a flat rate that does not relate to the specific characteristics of the generation facility. The AEP Methodology, by contrast, takes into account the facility’s specific characteristics and is explained in more detail below.

31,171 (2005); *order on reh’g*, Order No. 2003-C, FERC Stats. & Regs. ¶ 31,190 (2005), *aff’d sub nom. Nat’l Ass’n of Regulatory Util. Comm’rs v. FERC*, 475 F.3d 1277 (D.C. Cir. 2007).

⁴ *Reactive Power Requirements for Non-Synchronous Generation*, Order No. 827, 155 FERC ¶ 61,277, *order on clarification and reh’g*, 157 FERC ¶ 61,003 (2016).

⁵ U.S.-Canada Power System Outage Task Force, *Final Report on the August 14, 2003, Blackout in the United*

C. The AEP Methodology

The AEP Methodology became the primary way to compensate generators for reactive power in regions that calculate compensation based on the generator’s physical characteristics. Under the methodology, the Commission identified three components of a generation plant related to producing reactive power: (1) the generator and its exciter; (2) the generator step-up transformer; and (3) accessory electric equipment that supports the operation of the generator-exciter, plus a fourth category that considers the remaining total production investment required to provide real power and operate the exciter. Because these components produce both real and reactive power, AEP developed an allocation factor to sort the annual revenue requirements of these components between real and reactive power production (the “AEP Methodology”). As described below, FERC recently initiated a notice of inquiry on reactive power compensation and market design that raises new questions about whether FERC will modify the AEP Methodology.

II. Current Compensation Models and Potential Changes

Compensation models for reactive power vary across the ISO/RTO regions, as well as regions where no ISO/RTO exists. While several models have remained static, others are in flux with potential upcoming changes. The models also differ from one another in levels of technical complexity. The following sections outline each ISO/RTO’s approach toward such compensation models.

While the AEP Methodology is the most time-consuming reactive compensation model, as it requires a FERC filing, it also provides the greatest degree of specificity in compensating an individual generator (or fleet of comparable generators) for its actual investment costs, and consistency in the payment. Flat rate compensation methodologies that take lost opportunity costs into account are also beneficial because they recognize that a generator providing reactive power may lose the opportunity to sell real power into the market.

States and Canada: Causes and Recommendations at 18 (April 2004).

⁶ FERC Staff Report, *Principles for Efficient and Reliable Reactive Power Supply and Consumption*, Docket No. AD05-1 (Feb. 4, 2005).

⁷ FERC Staff Report, *Payment for Reactive Power*, Docket No. AD14-7 (Apr. 22, 2014).

⁸ *American Electric Power Service Corp.*, Opinion No. 440, 88 FERC ¶ 61,141 (1999) (“AEP”).

Models that compensate only for the provision of reactive power when called upon provide the least amount of investment recovery to developers, and the greatest potential variability in the actual payment.

A. PJM

PJM Interconnection, L.L.C. (“PJM”) currently relies entirely upon the AEP Methodology. A generator seeking reactive power compensation must file an application with FERC pursuant to Section 205 of the Federal Power Act (“FPA”). The application will most likely be set for hearing and settlement judge proceedings. In the past few years, a number of applicants have sought, and received, reactive power compensation in this market under the AEP Methodology. Table 1 below provides a sampling of requested and settled compensation. Most reactive power compensation applications under the AEP Methodology are settled, with many in a settlement reached between FERC Staff and the applicant generator. Occasionally, the interconnected utility or another interested party may intervene in the proceeding. The parties in several of the applications have been unable to reach settlement and therefore gone to full-blown litigation, taking over two years.

Table 1. PJM Reactive Power Settled Outcomes. (*see Table at end of this article*)

In 2021, PJM initiated a Reactive Power Compensation Senior Task Force (“RPCTF”),⁹ which was tasked with examining PJM’s existing reactive power compensation model and determining whether changes should be made. Following 13 months of meetings, in December 2022, the task force polled whether a change should be made to the current system. Six potential packages were presented to stakeholders, ranging from zero compensation as a separate service, to the *status quo* to various forms of a flat rate. PJM posted the results of the poll on December 23, 2022.¹⁰ 62% of voting members did not believe that a change was needed to PJM’s current reactive power construct, while 38% indicated a desire for change. 81% believed that a cost-of-service model should be utilized, and 84% indicated that the AEP Methodology is “a reasonably accurate determination for generator reactive costs.” 69% voted no to a flat rate. The only package to receive more than 20-28% support was

⁹ See PJM Reactive Compensation Senior Task Force, <https://www.pjm.com/committees-and-groups/task-forces/rpctf>

¹⁰ See RPCTF Poll Results (Jan. 6, 2023), available at <https://www.pjm.com/-/media/committees-groups/task-forces/rpctf/2023/20230106/item-01---rpctf-poll-results-.ashx>

proposed by the Clean Energy Caucus (“CEC”), and incorporates a flat rate per technology, which would eliminate the need for individual filings at FERC. The RPCTF will reconvene in January 2023 to consider poll results and next steps.

B. MISO

Like PJM, the Midcontinent Independent System Operator, Inc. (“MISO”) relies upon the AEP Methodology. A generator intending to receive reactive power compensation in MISO must file an application with FERC pursuant to FPA Section 205 and provide notice to MISO.

Table 2. MISO Reactive Power Settled Outcomes. (*see Table at end of this article*)

In their comments on the Reactive NOI, the MISO Transmission Owners (“MISO TOs”) asserted that MISO should adopt a reactive performance compensation methodology similar to the approach used in Southwest Power Pool, Inc. (“SPP”), rather than a reactive capability compensation methodology. Under a reactive performance methodology, generators are compensated when they are called upon by the ISO/RTO or other transmission provider to actually provide reactive power, rather than being compensated for the ability to provide reactive power in general. Since generators may or may not be called upon to provide reactive power, a reactive performance compensation model results in highly variable and less predictable compensation, as compared to a reactive performance capability model that compensates the generator at a set level (based on expected availability) regardless of how often it is called upon.

On November 11, 2022, the MISO TOs circulated to MISO and its stakeholders a notice that the MISO TOs intend to file with the Commission to eliminate from MISO’s tariff the provision allowing for reactive power compensation within the standard power factor range.¹¹ The MISO TOs indicated that they are providing at least 30 days’ notice of their intent to file. On November 30, 2022, MISO and the MISO TOs filed, in Docket No. ER23-523, to remove the obligation for MISO TOs to pay reactive power compensation under Schedule 2 to its own affiliated generators, which therefore terminates the MISO TOs’

¹¹ Dumais, P., *MISO is filing at FERC to remove reactive power compensation for reactive power provided within the power factor range in the IA* (Nov. 15, 2022), available at <https://energycentral.com/c/tr/miso-filing-ferc-remove-reactive-power-compensation-reactive-power-provided>

obligation to pay reactive power compensation to all generators under Schedule 2, as of December 1, 2022.¹² MISO asserts that if a generator is directed to provide reactive power outside of the standard power factor range, the generator will be compensated based on existing tariff mechanisms.¹³ These tariff mechanisms include the make-whole payment mechanisms in Module C and Schedule 27 of the MISO Tariff.¹⁴ MISO claims, however, that manual dispatch for voltage support is rare and has not occurred in the past three years.¹⁵ As of the comment deadline, 15 sets of comments or protests have been filed, many strongly opposing MISO's proposal.

C. ISO New England

ISO New England, Inc. ("ISO-NE") compensates generators for reactive power capability at a flat rate that is multiplied by the resource's tested reactive power capability. ISO-NE does not require a FERC filing to receive reactive power compensation. Instead, ISO-NE requires that resource owners submit a completed Qualified Reactive Resource ("QRR") Request Form and provide accompanying data, as described below.

To be eligible for reactive power payments under Schedule 2 of the ISO-NE Tariff, a resource must be designated as either a generator or non-generator QRR. A generator is eligible to be designated as a QRR if it meets criteria set forth in the tariff. These criteria include being a market participant interconnected to the ISO-NE system and metered and dispatched by ISO-NE, or otherwise subject to ISO-NE's operational control. The generator must be capable of providing measurable dynamic reactive power voltage support, must meet reactive power testing requirements, and must provide accurate reactive capability data.¹⁶ Non-generator resources may also qualify as a QRR if they are capable of providing reactive power.¹⁷

Pursuant to Schedule 2 of the ISO-NE Tariff, the flat rate at which QRRs are compensated for reactive power capability is comprised of the following elements:¹⁸

¹² *Midwest Independent System Operator, Inc. and MISO Transmission Owners*, Tariff Filing, Docket No. ER23-523-000 (Nov. 30, 2022).

¹³ *Id.* at 5.

¹⁴ *Id.* at 9, *citing* Tariff, Module C, Sections 40.3.5, 40.3.6; *id.*, Schedule 27.

¹⁵ *Id.* at n. 34, *citing MISO Manual Redispatch Information* (providing reports for manual redispatch instances, which show 723 instances of manual redispatch since November 2019 and no instances of voltage control), *available at*

First, a flat rate for capacity costs ("CC") designed to compensate for fixed capital costs related to providing reactive power. This rate is determined annually based on the formula of Adjusted CC Rate * Min (1, (1.2 * Forecast Peak Adjusted Reference Load for the year/(SUM of all Qualified Reactive Resources' Summer Seasonal Claimed Capability)). This rate was \$1.1012/kVAR in 2022, and \$1.0934/kVAR in 2021.¹⁹

Second, a variable rate for lost opportunity costs, for generators which are dispatched down by ISO-NE to provide reactive power shall be calculated pursuant to Market Rule 1 of the ISO-NE Tariff.

Third, a variable rate for energy consumed (cost of energy consumed, or "CEC") to produce the reactive power. The CEC equals the cost of additional energy to produce or absorb reactive power at zero real power output that would not have been consumed if the resource were not dispatched to provide VAR Service. It is calculated on an hourly basis as follows: CEC= (MWhUnit * (LMP or actual energy cost)).

Fourth, a variable rate for costs for the resource to come online or increase its output above its economic loading point, calculated as the Cost of Energy Produced ("CEP") based on the portion of the Net Commitment Period Compensation ("NCPC") to be paid to the resource for the day per Market Rule 1.

D. New York ISO

Similar to ISO-NE, the New York Independent System Operator ("NYISO") does not require a FERC filing in order to receive reactive power compensation. Instead, compensation requests are processed by NYISO following the submission of a Voltage Support Services ("VSS") Qualification Form and required documentation.

To qualify as a VSS Supplier and receive compensation, suppliers must be able to produce and absorb reactive power within its tested reactive capability range, maintain a specific voltage level, and have

http://www.oasis.oati.com/woa/docs/MISO/MISDocs/Mannual_Redispatch.html

¹⁶ ISO-NE Transmission, Markets and Services Tariff Schedule 2 § II(A).

¹⁷ ISO-NE Transmission, Markets and Services Tariff Schedule 2 § II(B).

¹⁸ ISO-NE Transmission, Markets and Services Tariff Schedule 2 § IV.

¹⁹ *See* VAR Annual Capacity Cost Report, *available at* <https://www.iso-ne.com/isoexpress/web/reports/billing/-/tree/schedule-2---var-annual-capacity-cost-rate-report>

functioning automatic voltage controlling equipment. Further, the supplier must be under NYISO's operational control, and successfully perform required testing.²⁰

NYISO compensates generators at a stated rate. The rate was \$3,919/MVAR for 15 years, from 2002 to 2017, but only paid for lagging power. The rate now compensates for both leading and lagging power, resulting in an increase to most generators, and is adjusted annually based on the Consumer Price Index. The 2022 compensation was \$2,965.84/MVAR. Generators receiving compensation must demonstrate their leading and lagging reactive power capability annually through a reactive power test or operational data.²¹

E. SPP

As noted above, SPP compensates generators for the reactive power they provide when called upon, rather than compensating generators for possessing the capability to provide such power. As such, generators in SPP receive a highly variable reactive payment that is dependent on how often they are called upon. A "Qualified Generator" is a generator capable of producing reactive power outside of the 0.95 leading to 0.95 lagging range, able to respond to dispatch instructions, and able to transmit data regarding its provision of reactive power. SPP's definition does not permit non-generation resources, such as storage, to provide reactive power.

SPP compensates in the amount of \$2.26 per qualifying MVAR-hour.²² This rate has not changed in almost a decade. Further, SPP has asserted that generators should not be eligible to recover lost opportunity costs by default as part of reactive compensation. Therefore, if a generator stops producing real power in order to provide reactive power at SPP's request, that generator will be compensated at the tariff-specified rate regardless of the prevailing locational marginal price of power at the time it stops producing real power. This could potentially result in a financial loss at times when market prices are high.

F. ERCOT

The Electric Reliability Council of Texas ("ERCOT") currently requires generators Energy storage resources to provide voltage support.²³ Generally, this

requirement exists for all such resources with a gross generating unit rating greater than 20MVA that are connected to transmission facilities. For inverter-based resources like wind and solar power, the ERCOT Protocols require that reactive power be available at all MW output levels at or above 10% of the facility's nameplate capacity. When an inverter-based resource is operating below 10% of its nameplate capacity and is unable to support voltage at its interconnection point, ERCOT or a transmission provider may require that resource to disconnect from the ERCOT system to maintain reliability. A generator and transmission provider may enter into an agreement in which the generator compensates the transmission provider to provide voltage support on the generator's behalf to meet the reactive power requirements in the ERCOT Protocols.²⁴

ERCOT Nodal Protocols Section 6.6.7.1 provides for voltage support service payments. Generators are eligible for reactive compensation only if ERCOT issues a dispatch instruction. If ERCOT instructs a generator to exceed its unit reactive limit and the generator provides reactive power, then ERCOT compensates the unit at a price that recognizes the avoided cost of reactive support resources on the transmission network. If ERCOT directs a reduction in real power to provide additional reactive capability, then that reduction is compensated as a lost opportunity payment.²⁵

G. CAISO

The California Independence System Operator ("CAISO") compensates generators for reactive power produced outside of the standard power factor of 0.95 leading or lagging. Pursuant to its tariff, CAISO may request generators to provide reactive power outside of the standard power factor, and will compensate generators based on the opportunity cost of the foregone sales of real power.²⁶ Generators must qualify to provide reactive power to CAISO, in the same manner that they qualify to provide other ancillary services.²⁷ In 2017, FERC agreed with CAISO that further payments for reactive power are

²⁰ NYISO Tariff, Rate Schedule 2, §15.2.1.1; NYISO Ancillary Services Manual, § 3.2.

²¹ NYISO Services Tariff § 15.2; NYISO Manual 2 § 3.6.

²² SPP Tariff, Schedule 2 § III.A.

²³ Specifically, with certain specified exceptions, ERCOT requires Generation Resources and Energy Storage Resources to provide leading and lagging reactive

capability equivalent to a 0.95 power factor. ERCOT Nodal Protocols § 3.15.

²⁴ ERCOT Nodal Protocols § 3.15(12).

²⁵ ERCOT Nodal Protocols § 6.6.7.1.

²⁶ CAISO Tariff §§ 8.2.3.3, 11.10.1.4.

²⁷ CAISO Tariff §§ 8.4.

not required.²⁸ No changes are currently pending or proposed to CAISO's compensation model.

III. FERC Notice of Inquiry

In 2021, FERC issued a notice of inquiry asking for the industry's input on reactive power compensation and market design. In particular, FERC identified several flaws in the current methodologies, including reliance on the AEP Methodology. First, FERC noted that the AEP Methodology is static and does not take into account potential degradation of a facility's production over time. Once a facility is granted a particular cost-based rate for its reactive power, that rate remains in place indefinitely. Second, the AEP Methodology was created to determine the reactive output of a fleet of synchronous generators and does not properly account for non-synchronous resources such as wind or solar. Third, given the requirements of the AEP Methodology and the lack of cost-based data from companies that often operate under market-based rate authority, facilities that sought reactive compensation frequently ended up in time-consuming and expensive litigation.²⁹

The Commission received over 50 sets of initial and reply comments from a diverse set of stakeholders. All of the ISO/RTOs filed an update on their current compensation models, and a variety of developers and other interested stakeholders filed comments regarding potential considerations the Commission should take into account. A group of renewable developers argued that the AEP Methodology is the preferred alternative that permits developers to recover its full investment in the asset, and is readily applicable to inverter-based resources.³⁰ Similarly,

a coalition of clean energy interests argued that the Commission should adopt an AEP Methodology template that would establish a "streamlined, formulaic approach to compensating all resources for the provision of reactive power."³¹ Conversely, the PJM Independent Market Monitor argued that the market does not need separate cost of service compensation for reactive power, and resources fully recover their investment in the market.³²

While a notice of inquiry is frequently a precursor to a potential notice of proposed rulemaking, the Commission has not signaled whether it intends to pursue further consideration of a rulemaking regarding reactive power.

IV. Conclusion

Reactive power provides synchronous and non-synchronous generators, as well as other forms of non-generation resources capable of providing reactive power, with a potential additional revenue stream. While the various compensation models may be complicated and technical, resources capable of providing this valuable service to the grid should pursue qualification. While revenues may seem uncertain or complicated, particularly as compared to the potential regulatory burden of the qualification process, the potential additional revenue may be valuable in areas where energy and capacity payments are lower.

(see Table 1 and Table 2 on next page)

²⁸ *Cal. Indep. Sys. Operator Corp.*, 160 FERC ¶ 61,035, P 19 (2017).

²⁹ See, e.g., *Fern Solar LLC*, Docket No. ER20-2186-000 (application for reactive compensation filed June 2020, parties filing testimony in December 2022 in preparation for a hearing in 2023).

³⁰ *Reactive Power Capability Compensation*, Initial Comments of the Renewable Generation Companies at 6, Docket No. RM22-2-000 (filed Feb. 22, 2022).

³¹ *Reactive Power Capability Compensation*, Initial Comments of the Clean Energy Coalition at 5, Docket No. RM22-2-000 (filed Feb. 22, 2022).

³² *Reactive Power Capability Compensation*, Initial Comments of the PJM IMM at 1, Docket No. RM22-2-000 (filed Feb. 25, 2022).

Table 1. PJM Reactive Power Settled Outcomes.

Applicant	FERC Docket	Size (MWac)	Filed (\$)	Resolution
Great Bay Solar II, LLC	ER20-2108	43.7	\$648,378	\$272,500
Eastern Shore Solar, LLC	ER20-707	80	\$857,041	\$400,000
OneEnergy Baker Point Solar, LLC	ER19-62	9	\$147,689	\$113,000
Flemington Solar, LLC	ER18-2063	9	\$133,346	\$75,000
PA Solar Park, LLC	ER18-1226	10	\$241,488	\$95,000
Frenchtown I Solar, LLC	ER18-89	3	\$49,966	\$29,217
Frenchtown II Solar, LLC	ER18-90	3	\$48,695	\$29,217
Frenchtown III Solar, LLC	ER18-734	8	\$94,812	\$37,500
Pilesgrove Solar, LLC	ER17-2415	18	\$362,904	\$212,500
Great Bay Solar I, LLC	ER17-2386	75	\$2,552,780	\$525,567

Table 2. MISO Reactive Power Settled Outcomes.

Applicant	FERC Docket	Size (MWac)	Filed (\$)	Resolution
Coyote Ridge Wind, LLC	ER22-80	97	\$763,171	\$363,000
Tuscola Bay Wind, LLC	ER19-2235	120	\$938,561	\$533,000
Assembly Solar I, LLC	ER21-1215	50	\$772,999	\$375,000
Oliver Wind I, LLC	ER21-2179	50.6	\$313,762	\$190,000
Pioneer Trail Wind Farm, LLC	ER18-1473	150	\$826,926	\$493,000
Stuttgart Solar, LLC	ER18-1704	81	\$290,779	\$204,000

**Competition Between Dominant Estates & Alternative Energy Development Projects After
*Coyote Lake Ranch LLC v. City of Lubbock***

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I. Introduction

(a) Building Good Fences:

In 1929, Poet Laureate Robert Frost wrote the famous words we all first heard in grammar school: Good fences make good neighbors.¹

On its face the quote has a simple and easily interpreted meaning. Physical fences provide boundaries for one's property and protect the appurtenant rights of the landowners on either side of the fence to beneficially use and enjoy the same. Properly located and constructed fences can prevent trespass, intentional or inadvertent, as well as prevent other forms of conflict between owners. For example, fences keep one's livestock on your property, rather than having them roam across an invisible, but otherwise unsecure boundary line between you and your neighbor.²

For purposes of this Article, the concept of "good fences" is a metaphor that provides some practical lessons related to the concurrent uses, or exercise of separate rights to develop the same piece of property without conflict. The basic lesson is not that we should all build fences around our respective development projects, whether physical or virtual, but rather that we should have and recognize guidelines that give notice of one another's rights with respect to real property or real property rights we might own and control. The second lesson is that in the absence of proper planning to provide the recommended fences in the form of detailed written contractual terms, restrictions and covenants, reservations or recorded deed restrictions, the courts will more likely than not impose the necessary "fences" through the application of the common law "accommodation doctrine."

(b) What are we "fencing":

¹ See Frost, *The Mending Wall* (1914).

² Texas has recognized the benefit of fences, particularly with respect to livestock, as in many counties, "fencing" laws have been adopted. See generally, Texas Agriculture Code Ch. 143 (Fences; Range Restrictions).

³ See generally, Texas Comptroller's "Fiscal Notes: Winter Storm Uri 2021" (October 2021) (available online

When one thinks about "energy" in Texas, the immediate key words are "oil and gas." Advances in technology, as well as the experience of so-called "Winter Storm Uri,"³ have given rise to more discussion about, and investment in, alternative energy strategies in Texas – specifically wind and solar alternatives.

Among the challenges brought on by new technologies is predicting how conflicts involving the implementation of the new technologies will be handled in the marketplace, as well as the courthouse. Growth in the development of alternative energy projects has triggered a need for practitioners to understand the "character" of these alternative energy projects together with the "rights," and limitations upon the "rights" of these projects vis-à-vis the character and rights of traditional oil and gas-based projects and similar property rights involving groundwater projects. Texas law recognizes that the ownership of real property comes with it certain rights often referred to as a "bundle of rights" or "bundle of sticks."⁴

**(c) Unpacking the "bundle of sticks" and
Dominant vs. Servient Estates:**

Included in that "bundle of sticks," at least for the owner of real property in "fee simple" is the ownership of (i) the surface of the property, and (ii) both the minerals and groundwater found in, on and under the property.⁵ Moreover, Texas law has long recognized the right of the fee simple landowner to sever the "surface estate" and the separate "mineral estate" and "groundwater estate" from one another, and to convey the severed estate and all of its appurtenant rights to a third-party.⁶

The severance of these distinct property interests, and the rights associated with them, have resulted in conflicts during the development of the rights associated with the respective estates. In the context of a severed

at <https://comptroller.Texas.gov/economy/fiscal-notes/2021/Oct/winter-storm-impact.php>.

⁴ *Lightning Oil Co. v. Anadarko E&P Onshore, LLC*, 520 S.W.3d, 48-49 (Tex. 2017).

⁵ See generally Tex. Prop. Code § 5.001.

⁶ *Cowan v. Hardeman*, 26 Tex. 217, 223 (1862); see *Coyote Lake Ranch LLC*, 498 S.W.3d 53, 60-61 & n. 17 (Tex. 2016).

mineral estate interest, the Texas Supreme Court has held that the conveyance of the mineral interest includes five rights:

- "(1) the right to develop,
- (2) the right to lease,
- (3) the right to receive bonus payments,
- (4) the right to receive delay rentals, and
- (5) the right to receive royalty payments."⁷

Under Texas law, both the mineral estate and groundwater estate are treated as being "dominant" in their relationship to the servient surface estate. For this reason, absent (i) the inclusion of specific contractual terms and conditions related to the use and/or occupancy of the surface, or (ii) some reservation or restriction expressly imposed in the conveyancing instrument limiting the exercise of the five rights enumerated above, pursuant to Texas Common Law, Texas Courts will allow the owner of the severed mineral estate to exercise the "implied right" to use as much of the surface estate as is reasonably necessary to explore for, drill or mine, and develop and produce the minerals.⁸

While no reported case has declared these same five rights apply to a conveyance of a severed interest in the groundwater estate, it is more likely than not based upon two of the more recent Supreme Court decisions addressing the property rights associated with the groundwater estate that the Court would conclude that the same five rights associated with a mineral estate conveyance apply.⁹

⁷ *Lightning Oil Co. v. Anadarko E&P Onshore, LLC*, 520 S.W.3d 39, 49 (Tex. 2017)(citing *Hysaw v. Dawkins*, 483 S.W.3d 1, 9 (Tex. 2016)(quoting *French v. Chevron U.S.A., Inc.*, 896 S.W.2d 795, 797 (Tex. 1995))).

⁸ *Sun Oil Co. v. Whitaker*, 483 S.W.2d 808, 810-811 (Tex. 1972); see *Coyote Lake Ranch LLC v. City of Lubbock*, 498 S.W.3d 53, 59 & n. 14, 60 & n. 18 (Tex. 2016); *Getty Oil v. Jones*, 470 S.W.2d 618, 621 (Tex. 1971).

⁹ See *Coyote Lake Ranch LLC v. City of Lubbock*, 498 S.W.3d 53, 58-60 (Tex. 2016) (recognizing the analogies between oil and gas in place and groundwater in place beneath the surface); *EAA v. Day*, 369 S.W.3d 814, 823 (Tex. 2012) ("we held long ago that oil and gas was owned in place, and we find no reason to treat groundwater differently").

¹⁰ *Getty Oil v. Jones*, 470 S.W. 2d 618, 621-22 (Tex. 1971).

¹¹ See *Coyote Lake Ranch LLC v. City of Lubbock*, 498 S.W.3d 53, 60-61 (Tex. 2016) (citing *Cowan v. Hardeman*, 26 Tex. 217, 22 (1862)).

The rights afforded to the dominant estate under Texas law, however, are not without limits.¹⁰ It is imperative that one recognize that the designation of being the "dominant estate" does not indicate any superiority of the estate nor the benefits derived from its development or use.¹¹ Instead, the designation of being "dominant" is borne out of necessity.¹² Specifically, the "servitude" character of the surface estate results from the fact that in order to develop and exploit the subsurface minerals and/or groundwater, the owner of those estates *must* have access via the use of the surface estate.¹³

The common law rights implied in favor of the dominant estate in the absence of specific agreed upon contractual, lease or deed terms, however, are not without limit.¹⁴ Moreover, Texas has long recognized that parties can limit, or eliminate the implication of any "implied rights" as a matter of contract.¹⁵ In the *Coyote Lake Ranch* case, the Texas Supreme Court reiterated the precept that "As a rule, parties have the right to contract as they see fit as long as their agreement does *not* violate the law or policy."¹⁶

Texas Courts have held that the implied rights granted to the dominant estate must be exercised with "due regard" to the rights of the owner of the servient surface estate.¹⁷ In fact, pursuant to the accommodation doctrine, the Courts have made clear that the holder of the servient estate must demonstrate that it has no reasonable alternative to develop and enjoy the surface estate that is not economically impracticable or unreasonable to force the holder of the dominant estate to utilize an available alternative.¹⁸

¹² *Coyote Lake Ranch LLC v. City of Lubbock*, 498 S.W.3d 53, 60 (Tex. 2016) (citing *Harris v. Currie*, 176 S.W.2d 302, 305 (Tex. 1943)).

¹³ *Coyote Lake Ranch LLC v. City of Lubbock*, 498 S.W.3d 53, 60-61 n. 20 & 21 (Tex. 2016); *Getty Oil Co. v. Jones*, 420 S.W. 2d 618, 621-622 (Tex. 1971).

¹⁴ *Id.*

¹⁵ *Coyote Lake Ranch LLC v. City of Lubbock*, 498 S.W.3d 53, 59 & n.13 (Tex. 2016) (emphasis added) (citing *In re Prudential Ins. Co. of Am.*, 148 S.W.3d 124, 129 (Tex. 2004)).

¹⁶ See *Id.*

¹⁷ *Getty Oil Co. v. Jones*, 470 S.W.2d 618, 621-622 (Tex. 1971); *Coyote Lake Ranch LLC v. City of Lubbock*, 498 S.W.3d 53, 60-61 & N.22 (Tex. 2016); *Merriman v. XTO Energy, Inc.*, 407 S.W.3d 244, 250 (Tex. 2013) (the issue is one of fairness to both parties in light of any existing use of the surface balanced by the rights of the needs of the dominant estate).

¹⁸ *Coyote Lake Ranch LLC v. City of Lubbock*, 498 S.W.3d 53, 62 (Tex. 2016); *Merriman v XTO Energy, Inc.*, 407,

In 2013 the Texas Supreme Court decided *Merriman v. XTO Energy*,¹⁹ and clarified the elements that must be established for the servient estate's needs to prevail over those of the dominant surface estate:

To obtain relief on a claim that the mineral lessee has failed to accommodate an existing use of the surface, the surface owner [servient estate] has the burden to prove that (1) the lessee's use completely precludes or substantially impairs the existing use, and (2) there is no reasonable alternative method available to the surface owner by which the existing use can be continued. If the surface owner carries that burden, he must further prove that given the particular circumstances, there are alternative reasonable, customary, and industry-accepted methods available to the lessee which will allow recovery of the minerals and also allow the surface owner to continue the existing use.²⁰

The Court in *Merriman* summed up its rationale with the following conclusion:

*The issue is one of fairness to both parties in light of the particular existing use by the surface owner and the principle underlying the accommodation doctrine: balancing the rights of surface and mineral owners to use their respective estates while recognizing and respecting the dominant nature of the mineral estate.*²¹

The focus of this article is the need to carefully craft terms and conditions for the development of these surface estate-based alternative energy projects because the project (i) requires the use of substantial surface acreage and the associated "development rights" of the so-called "surface estate," and (ii) the acreage is "servient" to the development of projects appurtenant to both the severed oil and gas or mineral estate, and the groundwater estate which are treated as "dominant" in the event of any operational conflict.

SW3d 247, 250 (Tex. 2013); *Getty Oil v. Jones*, 470 S.W. 2d 618, 623 (Tex. 1971) (citing *Humble Oil & Refining Co. v. Williams*, 420 S.W.2d 133 (Tex. Sup. 1967)).

¹⁹ 407 S.W. 3d 244 (Tex. 2013).

²⁰ *Id.* at 249; see *Coyote Lake Ranch LLC v. City of Lubbock*, 498 SW3d 53, 62 (Tex. 2016) (quoting *Merriman*, *supra*).

(d) The "Accommodation Doctrine" provides "Checks and Balances":

In 1971, the Texas Supreme Court adopted the "accommodation doctrine" in *Getty Oil Co. v. Jones*.²² The Court held:

[W]here there is an existing use by the surface owner which would otherwise be precluded or impaired, and where under the established practices in the industry there are alternatives available to the lessee whereby the minerals can be recovered, the rules of reasonable usage of the surface may require the adoption of an alternative by the lessee.²³

As the Supreme Court noted in its 2013 decision in *Merriman v. XTO Energy, Inc.*, it is "a balancing act."²⁴

Over time, Texas Courts have developed and refined the methods and criteria for handling the conflicts through the application of the "Accommodation Doctrine." What is new on the horizon, are the conflicts between the owners of the separate severed estates, and the development of the alternative energy projects which are of a different character in that while they relate to the development of natural sources to generate energy, *e.g.*, the sun and the wind, they are not part of, or attached to a separate or severable estate like oil and gas are a part of the mineral estate. The development of solar and wind energy resources are part of, and necessarily connected to, the "surface estate." As part of the surface estate, therefore, the development of these two alternative energy strategies do not have the "benefits" or "privileges" of oil and gas development characterized as part of the "mineral estate."

Accordingly, when it comes to conflict resolution involving one of these alternative energy strategies, the Courts, following developed methodologies such as the accommodation doctrine, will categorize both the solar and wind alternative energy strategies as part of the "surface estate." For this reason, surface use conflicts in connection with resource development should be anticipated and addressed.

²¹ *Merriman v. XTO Energy, Inc.*, 407, SW3d 247, 249 (Tex. 2013) (emphasis added).

²² 470 S.W.2d 618 (Tex. 1971).

²³ *Id.* at 622; see *Coyote Lake Ranch LLC v. City of Lubbock*, 498 S.W.3d 53, 61 (Tex. 2016).

²⁴ 407 S.W.3d 244, 249 (Tex. 2013).

II. Coyote Lake Ranch LLC v. City of Lubbock

In *Coyote Lake Ranch LLC v. City of Lubbock*,²⁵ the Supreme Court was faced with the question of whether the common law “accommodation doctrine,” which had its origin in the principles from oil and gas law, should be applied to the development of the groundwater estate.²⁶ The dispute arose *circa* 2012 between the groundwater rights owner, the City of Lubbock, and the surface owner, Coyote Lake Ranch LLC, which was conducting a large cattle ranching operation on the 26,000-acre property.

In 1953, the City of Lubbock had purchased the groundwater rights underlying the entire ranch from Coyote Lake Ranch's predecessor in interest, subject to a reservation in favor of the surface owner of the right to drill a limited number of groundwater wells and to use the groundwater produced for agricultural and domestic purposes on the Ranch. The reservation authorized the drilling of one or two irrigation wells in 16 specified areas of the Ranch.²⁷ The 1953 deed granted broad, and fairly detailed and explicit rights of “surface use” across the Ranch to the City of Lubbock. In part, the deed recited as follows:

...ingress and egress in, over, and on said lands, so that the Grantee of said water rights may at any time and location drill water wells and test wells on said lands for the purpose of investigating, exploring producing, and getting access to percolating and underground water; together with the rights to string, lay, construct, and maintain water and fuel pipe lines and trunk, collector, and distribution water lines, power lines, communication lines, air vents with barricades, observation wells with barricades, if required, not exceeding ten (10) square feet of surface area, reservoirs, booster stations, houses for employees, and access roads on, over and under said lands necessary or incidental to any of said operations, together with the right to erect necessary housing for wells, equipment and supplies, together with perpetual easements for all such purposes, together with the rights to use all that part of said lands necessary or incidental to the taking of percolating and underground water and the production,

treating and transmission of water therefrom and delivery of said water to the water system of the City of Lubbock only...²⁸

The deed specifically addressed the City's rights related to well locations and surface use, both generally and for specific purposes, as follows:

Well locations: The City has "the full . . . rights of ingress and egress in, over, and on [the Ranch], so that the [City] may at any time and location drill water wells and test wells on said lands for the purpose of investigating, exploring[,] producing, and getting access to percolating and underground water," except that "no city water well shall be drilled . . . within one-fourth (1/4th) mile of any of the presently existing windmill wells."²⁹

Surface use generally: The City has "the right to use all that part of [the Ranch] necessary or incidental to the taking [,] production, treating[,], transmission[,], and delivery of . . . water."³⁰

Surface use specifically: The City—

- may construct certain specified facilities, including water lines, fuel lines, power lines, communication lines, barricades, and access roads "on, over and under said lands necessary or incidental to any of said operations;"
 - must pay rent for the surface occupied;
 - must "pay for damages to any surface property proximately caused by any operations or activities on [the] land by the City;" and
 - must install gates and cattle guards on its roads.³¹

Between 1953 and 2012, Lubbock had only developed seven groundwater wells along the northernmost border of the Ranch.³² In 2012, the City announced plans to expand its development of the Ranch's groundwater resources. The City laid out a plan to drill and

²⁵ 498 S.W.3d 53 (Tex. 2016).

²⁶ *Id.* at 55.

²⁷ *Id.* at 56.

²⁸ *Id.* at 56 & n. 6.

²⁹ *Id.* at 57.

³⁰ *Id.*

³¹ *Id.*

³² *Id.*

equip 20 wells through the center of the Ranch. In response, the surface owner expressed concerns about the adverse impacts to its cattle operations that the planned roads, transmission pipelines and power lines would cause to the fragile ecology of the surface.

During discussions with the Ranch owner, the City revealed additional future plans to drill and equip as many as 80 wells across the center and western edge of the Ranch. The identified locations included habitat of the lesser prairie chicken, a species then being considered for designation as “endangered.” The Ranch owner objected to the City’s proposed drilling program, arguing that it was reasonably calculated to substantially and unnecessarily interfere with the Ranch’s agricultural activities and to harm the fragile ecology of the very sandy surface. When subsequent discussions about methods of developing the wells, pipelines and power lines proved unfruitful, litigation ensued.³³

In seeking its temporary injunction against the City’s planned activities, the surface owner argued that the “accommodation doctrine,” a well-settled concept in oil and gas law, should apply based upon rationale in the Supreme Court’s decision in *Edwards Aquifer Authority v. Day*.³⁴

At the temporary injunction hearing, the surface owner adduced evidence (i) that mowing or removing vegetation from the surface would cause destructive wind erosion, and (ii) that cattle would tend to use the mowed and graded areas leading to the well sites as pathways, further exacerbating the harm. The manager of the cattle operations on the Ranch noted that the City had already mowed a series of paths to its proposed test well sites, which action had eroded the land to the extent that grass would not grow back, particularly in the then-critical stage drought that gripped the area. The surface owner also put on evidence that the City’s plan to construct power lines across certain areas of the Ranch would provide “roosts for birds of prey,” *e.g.*, raptors, who would prey upon the lesser prairie chickens on the ground below.³⁵

The trial court granted the surface owner’s temporary injunction, holding that the Ranch would likely prevail at trial and that the surface owner would be damaged absent the use of reasonable means to ameliorate the damage. The trial court’s ruling applied the tenets of

the accommodation doctrine as the trial court found that the City’s proposed well field plan to develop the groundwater estate could likely be accomplished through reasonable alternative means that would not unreasonably interfere with the surface owner’s current uses.³⁶

The City appealed arguing that its deed provided the City with the express right to conduct its proposed groundwater development operations and, therefore, the accommodation doctrine did not apply to groundwater.³⁷ The City’s opposition to the application of the accommodation doctrine rested on the premise that, unlike the mineral estate, the groundwater estate was not the “dominant estate.” The Amarillo Court of Appeals agreed with Lubbock, reversed the trial court and vacated the injunction, on the ground that no Texas court had applied the accommodation doctrine to groundwater.³⁸

On appeal, the Supreme Court held that the accommodation doctrine did apply to groundwater, and supported its analysis by observing that Texas law has long adhered to the idea that a landowner may sever the mineral and surface estates and convey them separately.³⁹ This act of severance gives rise to an implied right in favor of the mineral owner to use as much as the surface estate as reasonably necessary to use, produce and remove minerals.⁴⁰ The Court explained that, “in the law of servitudes, the mineral estate is “dominant” and the surface estate “servient,” *not because the mineral estate is in some sense superior, but because it receives the benefit of the implied right of use of the surface estate.*”⁴¹ In reaching its conclusion, the Court noted:

Groundwater and minerals both exist in subterranean reservoirs in which they are fugacious. An interest in groundwater can be severed from the land as a separate estate, just as an interest in minerals can be. A severed groundwater estate has the right to use the surface that a severed mineral estate does. Both groundwater and mineral estates are subject to the rule of capture. And both are protected from waste.⁴²

The Court further noted: “[C]ommon law rules governing mineral and groundwater estates are not merely similar; they are drawn from each other or from the same source.”⁴³

³³ See generally *Coyote Lake Ranch LLC v. City of Lubbock*, 498 S.W.53 (Tex. 2016).

³⁴ See *id.* at 58 & n.9 (citing *EAA v. Day*, 369 S.W.3d 814 (Tex. 2012)).

³⁵ *Coyote Lake Ranch LLC v. City of Lubbock*, 498 S.W.3d 53, 57-58 (Tex. 2016).

³⁶ See *id.* at 58.

³⁷ *Id.*

³⁸ *Id.*

³⁹ *Id.* at 60.

⁴⁰ *Id.*

⁴¹ *Id.* (emphasis added).

⁴² *Id.* at 63.

⁴³ *Id.* at 64.

Though the accommodation doctrine is applicable in only a very narrow set of circumstances, the Court's decision in *Coyote Lake* carries far-reaching implications. Essentially, the Court recognized that the similarities in the physical properties and legal standing of the mineral and groundwater estates require that, when applicable, concepts from oil and gas law should inform the resolution of groundwater disputes. Going forward, the application of oil and gas law to groundwater disputes will inevitably lead to challenges to groundwater regulatory regimes that afford differing treatment to groundwater owners in the same aquifer. See, for example, *Marrs v. Railroad Commission*, 177 S.W.2d 941, 948 (Tex. 1944). Likewise, the decision in *Elliff v. Texon Drilling Co.*, 210 S.W.2d 558 (Tex. 1948) can be used to argue that every groundwater rights owner should be afforded a fair opportunity to produce his fair share of the groundwater. Because the Railroad Commission rules (specifically Rule 37) are geared toward the prevention of confiscation (drainage without compensation), the many Rule 37 cases are useful guidance for future disputes regarding spacing, production limits and even Desired Future Conditions.

III. Lyle v. Midway Solar, LLC

Since the Supreme Court's decision in the *Coyote Lake Ranch LLC* case,⁴⁴ there has been one reported case involving an alternative energy project, *i.e.*, a solar project, and the applicability of the "accommodation doctrine."⁴⁵ In 2020, the Eighth Court of Appeals, sitting in El Paso, decided the case styled *Lyle v. Midway Solar LLC*.⁴⁶ The Court was presented with multiple issues on appeal, including the applicability of the accommodation doctrine to a dispute between the holder of an undivided interest in the mineral estate (the Lyles) and the owner of one hundred percent of the surface estate ownership (Mr. Drgac) and that owner's lessee (Midway Solar LLC) seeking to develop a solar project on the property.⁴⁷

Without addressing the various issues raised in the appeal that are beyond the scope of this Article, the key points of interest from the Court's ruling in *Lyle v. Midway Solar LLC*, *supra*, can be summarized as follows:

(i) The 1948 Deed severing the mineral estate from the surface estate, pursuant to which the Lyles derived their undivided interest in the mineral estate, did *not* preclude the application of the accommodation doctrine.⁴⁸

(ii) Though applicable to resolve a conflict, the conflict in the case was *not* ripe for the application of the accommodation doctrine. The Lyles had *not* leased their mineral rights, nor had there been an initiation of development of the mineral rights that resulted in an operational conflict between the rights of the dominant mineral estate and the rights of the servient surface estate.⁴⁹

(iii) While the solar operator Midway had constructed solar panels across approximately seventy percent of the surface acreage,⁵⁰ and the Court acknowledged the tenet in Texas law that a plaintiff need not perform a "futile act" to have a ripe claim,⁵¹ the Court noted the Lyle's admission that they had no "current mineral development plans."⁵²

(iv) On the basis of the facts summarized above, the El Paso Court concluded that under the accommodation doctrine, while some day the Lyle's complaint might warrant a different outcome, the Lyles had presented no evidence to the Court to support their request for relief under the accommodation doctrine.⁵³

III. Strategic Conflict Avoidance

Whether you, or your client, is (i) the fee simple owner of a tract of land of sufficient size to support either a solar or wind alternative energy project, or (ii) the owner of one or more of the severed estates (*e.g.*, surface, mineral or groundwater estates), (iii) an oil and gas or groundwater lessee, or (iv) a surface acreage lessee looking to develop a

⁴⁴ 498 S.W.3d 53 (Tex. 2016).

⁴⁵ *Lyle v. Midway Solar LLC*, 618 S.W.3d 857 (Tex. App. – El Paso 2020, pet. denied).

⁴⁶ 618 S.W.3d 857 (Tex. App. – El Paso 2020, pet. denied).

⁴⁷ *Id.*

⁴⁸ *Id.* at 870-872.

⁴⁹ *Id.* at 873-875.

⁵⁰ *Id.* at 874.

⁵¹ *Id.* (citing *DiGiuseppe v. Lawler*, 269 S.W.3d 588, 594-95 (Tex. 2008)).

⁵² *Lyle v. Midway Seller LLC*, 618 S.W.2d 857, 874 (Tex. App. – El Paso, pet. denied).

⁵³ *Id.* at 874. The Court also noted that even if it had erred in its decision based upon the accommodation doctrine, the outcome of the case would have been the same because the Lyle's failure to make any effort to develop their minerals undermined all of their related claims. *Id.* at 874-875.

solar or wind project, it would be prudent to address in advance the potential for operational conflicts. There are a number of viable options to achieve this objective, they include by way of example: (i) the development of express, detailed terms and conditions for inclusion in a lease or other agreement setting forth the respective rights of parties; (ii) development of surface use agreements, (iii) identification of potential (a) utility corridors or easements for use for pipelines, electric utilities and wired-communication systems, (b) roadway routes, (c) potential drill sites, and (d) sites for appurtenant operations, *e.g.*, storage facilities, treatment and/or processing facilities, and frac tanks.

Two important things to keep in mind are:

- 1) It makes a difference whether you are engaging in Strategic Conflict Avoidance pre-severance or post-severance of either (or both) the mineral estate and groundwater estate from the surface estate; and
- 2) In light of the Supreme Court finding sufficient ambiguity or lack of clarity in the very detailed provisions of the City of Lubbock's 1953 deed in the *Coyote Lake Ranch* case,⁵⁴ your articulation of details encompassed in your Strategic Conflict Avoidance, irrespective of vehicle you adopt to memorialize the same must reflect thorough analysis and consideration of the "what ifs."

(a) Pre-severance Concepts:

The development of conflict avoidance strategies prior to a severance of the surface estate and any of the potential "dominant estates" is always preferable. Pre-severance you can negotiate with the sole owner of the fee simple estate to address terms and conditions that will be protective of both your plans to develop a solar or wind project on the surface estate and the rights of the fee owner and their successors in interest to use, develop and enjoy both any reserved surface use rights and the subsurface resources included with the groundwater estate and the mineral estate.

Those agreements must be detailed. They must be reduced to writing and signed by all parties in interest, and, most importantly, must be filed of record in the official public records in each of the counties where the affected

property is located.⁵⁵ If confidentiality, or concerns regarding proprietary information contained in an agreement deed, lease or similar document make the recording of the actual document problematic, the objective of providing notice of the existence of some agreement addressing surface usage can be accomplished by recording a well-crafted "memorandum" of the document. The recording will put all subsequent buyers, assignees, heirs and lessees on notice of the agreements.

To the extent that any such agreements have been drafted with sufficient detail and clarity to avoid a court finding any "ambiguity," they should preclude the court from either (i) interrupting the conflicting rights of the parties based upon their status as the holder of the "dominant estate" or "servient estate," or (ii) applying the "accommodation doctrine" based upon a finding of ambiguity.

As evidenced by the Supreme Court's apparent reliance upon the threat of predator hawks perching on electric line towers to the welfare of the Lesser Prairie Chickens roaming the Ranch, there is no guarantee that a court will not find some ambiguity in the language despite the level of detail and specificity included in the agreement. Specifically, the listing of the Lesser Prairie Chicken as an endangered species was not a possibility in 1953⁵⁶ when the deed was drafted and executed, which explains why it was "silent" on the subject.⁵⁷

(b) Post-severance:

Post-severance of either (or both) the mineral estate and groundwater estate add a significant layer of complexity to strategic conflict avoidance. First, you must now identify, and then negotiate, multiple parties. Moreover, if you cannot successfully negotiate with any one or more of those parties, those parties will likely have an "upper hand" in any future operational conflict as the holder of an interest in a dominant estate. Under these circumstances the alternative energy project operator can use the same conceptual model for conflict avoidance, however, you will have to be more flexible, and/or less aggressive, in your project plans.

For example, the lessee of the surface estate desiring to install a solar or wind project ideally would like to negotiate a surface use agreement, or impose some form of restrictive covenants, that would prohibit any use of the surface for any purpose. The minerals and/or groundwater could be developed from off the affected surface acreage

⁵⁴ 498 S.W.3d 53 (Tex. 2016).

⁵⁵ Tex. Prop code § 13.002 (effect of a recorded instrument).

⁵⁶ The Endangered Species Act was not even the law until 1973. See 16 U.S.C. §§ 1531 *et seq.*

⁵⁷ *Coyote Lake Ranch LLC v. City of Lubbock*, 498 S.W.2d 53, 59 (Tex. 2016).

occupied by the solar or wind project from well sites using such horizontal or slant hole technologies.

Alternatives to this model could include either specific agreements to certain uses, site locations, etc., or a provision that the lessee either had (i) sole discretion to accept or reject a future request to use some portion of the surface estate, or (ii) the more liberal, no request for a future use of the surface acreage would be unreasonably withheld or delayed. The latter option, of course, opens the door to litigation over the meaning of the term “unreasonably,” unless the parties agree to a definition of the term and memorialize in a written agreement.

If the surface estate-based alternative energy project operator/lessee is unable to identify or, if identified, successfully negotiate some agreement(s) related to surface use with the mineral estate and/or groundwater estate owners, then they must undertake the necessary due diligence to complete a risk assessment to either assume the resulting risk to the project long-term, or plan the

project’s construction layout and future operations in a manner best situated to provide reasonable alternative means for the development of the dominant estate(s). Such planning would necessarily include such elements as routing for roads, utilities, well drilling sites and other appurtenant facilities. The ripple effects on the project economics caused by such planning will also need to be taken into consideration, *e.g.*, the loss of otherwise usable acreage for the installation of acres of solar panel arrays or additional windmill sites, and the resultant loss of generating capacity and the associated revenue stream.

IV. Conclusion

Long-term strategic conflict avoidance planning can be the difference between (i) the total loss of the alternative energy project, and (ii) the ability to invoke the “accommodation doctrine” and save the project investment. At the end of the day, strategic conflict avoidance, like “good fences,” can make good neighbors.

