



5-12-2021

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Recommended Citation

Warigia M. Bowman & Debbie Firestone, *Oklahoma Renewable Energy Policy Encounters a COVID Roadblock: 2019-2020*, 7 Tex. A&M J. Prop. L. 512 (2021).
Available at: <https://doi.org/10.37419/JPL.V7.I3.18>

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OKLAHOMA RENEWABLE ENERGY POLICY ENCOUNTERS A COVID ROADBLOCK: 2019–2020

Warigia Bowman and Debbie Firestone¹

I. INTRODUCTION: OKLAHOMA RENEWABLE POLICY IS STILL UNDER “CONSTRUCTION”

On the road to energy security, independence, and success, this past year Oklahoma has seen “construction” projects in the works. Renewable energy, however, hit a major roadblock in the form of the COVID-19 pandemic. Historically, Oklahoma produced most of its electricity through coal and natural gas.² In the past decade, renewable sources like wind and solar energy represent a growing segment of electricity generation in the state. In 2019 and 2020, Oklahoma developed a stronger renewable energy policy by enacting legislation, passing administrative decisions, and passing local city ordinances.

DOI: <https://doi.org/10.37419/JPL.V7.I3.18>

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2. *Oklahoma Renewable Energy*, ARCADIA BLOG, <https://blog.arcadia.com/oklahoma-renewable-energy> [https://perma.cc/PL3N-2SC6].

Yet Oklahoma has not fully tapped its solar or wind potential. Post-pandemic Oklahoma is poised to embrace solar and wind in electricity production, which will boost the state's status as an emergent, renewable energy powerhouse. Investments in renewable energy will also increase business opportunities and improve health outcomes for Oklahoma citizens.

I. WIND

A. Legislatively, Republican Legislators Sought to Maintain an Adequate Distance

In 2010, the Oklahoma Legislature issued a legislative declaration³ stating that the public interest demands that Oklahoma promote the development of a robust transmission of renewable wind energy from every part of the state for exportation to other states. The legislature and the Oklahoma Corporation Commission (the "OCC")⁴ have been working with Southwest Power Pool to develop a plan through the year.⁵ As a part of the Oklahoma Wind Energy Development Act,⁶ the legislature codified wind energy as an important asset for continued economic growth.⁷ The OCC is the oversight agency, and it requires energy producers to submit power generation reports annually.⁸ Landowners are paid based on the amount of electrical energy produced,⁹ and decommissioning must be completed by the owner of the wind energy facility within twelve months after abandonment.¹⁰

Incentives remain for wind energy in Oklahoma. For example, Oklahoma provides a tax credit for manufacturers of small wind turbines¹¹ and a credit for the sale of electricity generated by zero-

3. OKLA. STAT. tit. 17, § 287 (2010).

4. The Oklahoma Corporation Commission was established in 1907 by Article 9 of the Oklahoma Constitution. The Commission presently regulates public utilities, except those under municipal or federal jurisdiction or exempt from regulation; oil and gas drilling, production and environmental protection; the safety aspects of motor carrier, rail and pipeline transportation and the environmental integrity of petroleum storage tank systems. <https://oklahoma.gov/occ/about/history.html>

5. *Id.*

6. OKLA. STAT. tit. 17, § 160.12 (2010).

7. *Id.* at § 160.11.

8. *Id.* at § 160.18(A).

9. *Id.* at § 160.16.

10. *Id.* at § 160.14(C)(1).

11. OKLA. STAT. tit. 68, § 2357.32B (2010).

emission facilities.¹² There is an allowed credit against taxes owed for the sale of electricity generated by wind for facilities placed in operation no later than July 1, 2017.¹³ These financial incentives represent an increase of and an improvement over previous incentives and suggest an increasing desire to support wind energy in the state.

The Oklahoma Legislature introduced significant legislation in 2019 and 2020 on matters ranging from notice requirements for the building of new wind facilities to decommissioning costs guidelines. “Setbacks” for wind facilities determine the distance between turbines and homes, buildings, or other structures. Setbacks are currently delineated with special attention to the distances from airports, public schools, and hospitals.¹⁴

In terms of partisan division, wind related bills were generally introduced by Republican state legislators representing districts in central, northern, and eastern counties exclusively. Statutes direct setbacks for turbines vis-à-vis public-use and municipal airports. Over the course of this past year, there has been a concerted push to amend the law to provide for private-use airport setbacks, but the COVID-19 pandemic appears to have halted the progress of those proposals. Legislation regarding setbacks can be viewed as a way to ensure that wind energy can still be produced while making neighboring residents and businesses more comfortable with its presence.

The Oklahoma Legislature recently enacted one bill regarding setback requirements for wind energy facilities—H.B. 2118.¹⁵ The bill modified the requirements for documentation and authorized the OCC as well as the Oklahoma Aeronautics Commission to promulgate rules.¹⁶ H.B. 2118 further provided that wind energy facilities shall not encroach upon any military installation or training operation.¹⁷ While the law only provided for setbacks from public-use airports or airports owned by a municipality, the bill did not include private-use airports. Senator Pederson from north central Oklahoma sought to rectify that situation with the introduction of two bills.¹⁸ Both bills attempted to define private-use airports for the purpose of wind tower

12. *Id.* at § 2357.32A.

13. *Id.* (Currently limited to tax years not later than Dec. 31, 2021).

14. *Id.* at § 160.20.

15. 2019 Okla. Sess. Laws 1191, 1191–92.

16. OKLA. STAT. tit. 17, § 160.20.

17. *Id.*

18. S.B. 355, 57th Leg., 1st Reg. Sess. (Okla. 2019); S.B. 877, 57th Leg., 1st Reg. Sess. (Okla. 2019).

setbacks, but these amendments failed to pass out of the House Committee on Rules.

Similar bills were introduced in 2020. Representative Newton from central Oklahoma introduced a bill¹⁹ that clarified the requirements for wind turbine setbacks from airports with a more robust definition of “airport.” The language of the bill sought to add private-use airports to the definition, but the bill failed to pass out of committee. Senator Pederson introduced legislation²⁰ with similar language clarifying that a setback needs to be enforced for a private airport that is used for at least twenty-four flights per year, but the legislation also failed to pass out of the Senate Committee on Energy.

With regard to wind energy, one proposed change in Oklahoma law is to require notice of intent to build energy generation facilities, and there are mandated public meetings and penalties assessed for not heeding those notice requirements.²¹ Senator Dahm of the Tulsa area introduced legislation²² that would have modified the timeline for notice to the OCC of the intent to build a wind facility. The bill sought to increase the notice from thirty days to ninety days, giving a wind energy operator more time to comply with the provisions of the statute. The bill passed out of the first committee but failed to pass out of the first chamber. Such notice requirements help to ensure that the public has a chance to evaluate energy generation facilities, and participate in decision-making regarding regulation of those installations.

Oklahoma City Representative McBride introduced the Oklahoma Zero-Emission Facility Energy Tax Act of 2019.²³ The Act would have levied a tax on certain electrical power production with the exception of wind turbines. This exception would have acted as a subsidy for wind production; however, the bill failed to pass out of committee.

Many states do not even address decommissioning.²⁴ In these states,²⁵ decommissioning is controlled only by the lease agreements signed between landowners and wind-farm operators. Frequently, these contracts do not clearly require operators to remove wind farm

19. H.B. 3296, 57th Leg., 2d Reg. Sess. (Okla. 2020).

20. S.B. 1302, 57th Leg., 2d Reg. Sess. (Okla. 2020).

21. OKLA. STAT. tit. 17, § 160.21.

22. S.B. 964, 57th Leg., 2d Reg. Sess. (Okla. 2020).

23. H.B. 1234, 57th Leg., 1st Sess. (Okla. 2019)..

24. William S. Stripling, *Wind Energy's Dirty Word: Decommissioning*, 95 TEX. L. REV. 123, 123–24, 139 (2016).

25. *Id.* at 139–40 (including states such as Colo., Iowa, Kan., Mont., N.M., and Tex.).

installations and restore the land, resulting in the possibility that non-operating turbines and their related structures may be left to decay on the land.²⁶ Even strong lease requirements are ineffective against bankrupt and insolvent operators. These decaying structures are at best an eyesore and, at worst, a danger to their neighbors. In addition, turbines can be refurbished, extending their lifespan. Due to the large amounts of metal used in the construction of wind turbines, the metal can be recycled for different commercial and industrial uses. Another emerging problem with wind energy is that the blades, made of a composite fiber glass material, are difficult to recycle. Unlike other states, Oklahoma has enacted thoughtful and comprehensive decommissioning regulations that lay out specific requirements for decommissioning and that also require operators to post a bond or a decommissioning security for wind farms.²⁷ Oklahoma models some of the best practices nationwide with regard to decommissioning wind turbines.

Several bills were introduced in the past two years that tackled these important wind turbine decommissioning issues. Representative McBride introduced an act²⁸ that would have modified the requirements for decommissioning costs related to wind energy, but the act also failed to pass out of committee. Senator Allen of LeFlore County in far eastern Oklahoma introduced a measure that sought to undergird decommissioning.²⁹ This measure would require material that is not recyclable to be removed from the state within ninety days and would assess fines of up to \$500 per day for each day the decommissioning went uncompleted.³⁰ The bill failed to pass out of the first chamber, but this issue will be back in 2021.

Oklahoma also introduced but did not pass various reform legislation.³¹ Representative Pfeiffer, another legislator of north central Oklahoma, introduced a bill to amend the valuation of property with respect to wind power assets for the purpose of revenue and taxation.³² The bill passed out of the house to the senate, but it did not

26. *Id.* at 140.

27. *Id.* at 141.

28. H.B. 1235, 57th Leg., 1st Sess. (Okla. 2019).

29. S.B. 1004, 57th Leg., 1st Sess. (Okla. 2019).

30. *Id.* at 2–3.

31. Representative Kannady of Oklahoma City introduced the Wind Energy Reform Act of 2020. (H.B. 3694, 57th Leg., 2nd Sess. (Okla. 2020)). Representative O'Donnell introduced another Wind Energy Policy Act of 2020, but both measures failed to pass out of committee. (H.B. 3633, 57th Leg., 2nd Sess. (Okla. 2020)).

32. H.B. 3194, 57th Leg., 2nd Sess. (Okla. 2019).

progress past the Senate Committee on Finance. It would have allowed a county assessor to value property owned in the production of electricity using wind for the purpose of assessing taxes.³³

B. OCC Urges Commercial Utility Companies to “Share the Road”

The OCC is the Oklahoma executive agency charged with regulating solar energy. The OCC, which develops and enforces regulations via applications, hearings, and rulemakings, issued a public utility decision after a series of hearings throughout the month of May. The OCC issued a finding in the Matter of the Application of Oklahoma Gas and Electric Company (“OG&E”) for an Order of the Commission Authorizing Applicant to Modify its Rates, Charges, and Tariffs for Retail Electric Service in Oklahoma.³⁴ The decision incorporated an Administrative Law Judge (“ALJ”) Report as well as a Non-Unanimous Joint Stipulation and Settlement Agreement (the “Agreement”).³⁵ Parties opposing the Agreement included the Sierra Club and Oklahoma Energy Results, who asserted that OG&E failed to model wind, solar, and other renewable energy resources in its overall plan.³⁶ The OCC disagreed with Sierra Club and found that OG&E appropriately relied on developed projections of wind energy in its modeling³⁷ by determining that wind energy was not a viable option to replace capacity at this time.³⁸

The OCC issued a decision concerning the Application of Public Service Company of Oklahoma (“PSO”) for Approval of Cost Recovery of Selected Wind Facilities (“SWF”).³⁹ PSO supported a need to purchase 675 MW installed capacity from SWFs⁴⁰ and requested cost recovery per OCC rules after a rigorous, independent valuation and competitive bidding process.⁴¹ The cost was capped at \$908.3 million, which will be offset by energy cost savings and tax credits amounting to \$1.42 billion.⁴² The estimated net change to residential customers would be almost 2% in reduced costs. Commercial customers would see an overall reduction of almost 3%

33. *Id.* at 11.

34. 2019 Okla. PUC LEXIS 238 (Okla. Corp. Comm’n September 19, 2019).

35. *Id.* at *2.

36. *Id.* at *101, *111, *115, *122, *126.

37. *Id.* at *7.

38. *Id.* at *32.

39. 2020 Okla. PUC LEXIS 170 (Okla. Corp. Comm’n February 20, 2020).

40. *Id.* at *9.

41. *Id.* at *36–37.

42. *Id.* at *11, *39.

by 2024, while industrial customers would see a 5% reduction or more.⁴³ Overall, the increase in wind power in Oklahoma represents a potential financial boon to residents as well as an economic opportunity for manufacturers and energy generators.

C. Cities Regulate via Local Fees, Permits, and Zoning, Keeping Both Hands on the Wheel

Many Oklahoma municipalities enacted wind ordinances, which focused on height, structure, and location requirements. The municipalities who took up wind regulation were concerned with siting and aesthetics. Such municipal legislations was more prevalent in Oklahomas's larger cities.

The town of Moore enacted a Land Development Code⁴⁴ with exceptions for wind energy systems. Moore's zoning districts are reviewed by their Board of Adjustment, which grants a special exception for a small, wind energy system intended to convert wind to energy. With only one wind tower per property, the minimum lot size is designated as one acre, and the bottom of the rotor blade is set at no closer than twenty feet above the ground surface.⁴⁵

Muskogee, also concerned about siting and aesthetics, enacted a Code of Ordinance⁴⁶ with a section on Wind Energy Conversion Systems ("WECS"). WECS are permitted in commercial and industrial areas as well as residential areas with a special exception.⁴⁷ The total height is not to exceed ten feet above the maximum permitted height of the zoning district, and the minimum clearance between the lowest tip of the rotor blade to the ground is to be twenty-five feet.⁴⁸ Roof-mounted or ground-mounted, the noise is not to exceed seventy-five decibels.⁴⁹ New projects are to be submitted for approval via application with a licensed engineer certification.⁵⁰

43. *Id.* at *34.

44. Moore, OKLA., LAND DEV. CODE § 12-125 (2019), https://library.municode.com/ok/moore/codes/land_dev_code?nodeId=PT12LADECO_CH1BOCO_ARTBBOAD_S12-125SPEXAPPRMOHOSMWIENSY [<https://perma.cc/V8V3-AVHJ>].

45. *Id.* at 12-125(f)(1), (3).

46. Muskogee, OKLA., CODE OF ORDINANCES § 90-12-04(o) (2019), https://library.municode.com/ok/muskogee/codes/code_of_ordinances?nodeId=PTIICOOR_CH90ZO_ART12TEDEST_90-12-04ACSTUS [<https://perma.cc/4U4B-ZMZB>].

47. *Id.* at 90-12-04(O)(1)(b).

48. *Id.* at 90-12-04(O)(2)(a)(i).

49. *Id.* at 90-12-04(O)(4).

50. *Id.* at 90-12-04(O)(2)(a)(iii).

Midwest City enacted a Code of Ordinance⁵¹ with regulations for WECS. WECS are to conform to building codes in the city and required setback distances are designated to be not less than one and one-half times the total height.⁵² For example, if the height of the WECS structure is 100 feet, then the structure must be a minimum of 150 feet from any exterior property line.

Oklahoma City wanted to address aesthetics and safety by enacting a Zoning and Planning Code⁵³ that limited private WECS requirements for tower structures. Oklahoma City's concern was that wind turbines should be able to withstand a load of 120 miles per hour wind velocity and be situated so that the distance from all property lines should be no less than the height of the tower.⁵⁴ Roof-mounted towers are prohibited in residential districts, and appropriate signage, noise level maintenance, and fencing are required.⁵⁵

Tulsa enacted a Code of Ordinance⁵⁶ concerning small WECS. Subject to building code requirements, three small wind energy conversion systems are allowed on a single, one-acre lot if approved with zoning districting rules.⁵⁷ These ordinances allow more small wind systems and permit wind systems inside city limits where maximum heights allowed go from thirty feet on smaller lots to up to 100 feet on lots of five or more acres.⁵⁸ Siting is also covered with systems to be set back from all property lines by a distance at least equal to 110% of the overall height of the system.⁵⁹ The ordinance also covers design, operation, permitting, and decommissioning.

Communities in Oklahoma also addressed purchase agreements and conversion systems. The town of Altus enacted a Wind Power Program⁶⁰ called the Green Power Wind Energy ("GPWE"), which set the purchase limits for wind energy at 100%. The prices were set at \$1.80 for each 100-kWh block with corresponding power cost adjustments.⁶¹

51. MIDWEST CITY, OK., CODE OF ORDINANCES App. A § 5.7.5 (May 28, 2019).

52. *Id.* § 5.7.5(L)(2).

53. OKLAHOMA CITY, OK., CODE OF ORDINANCES §§ 59-2150.2, 59-6100.2, & 59-12200 (Dec. 17, 2019).

54. *Id.* § 59-12200.3(F)(1)-(2).

55. *Id.* §§ (F)(3), (5), (6), (9).

56. TULSA, OKLA., CODE OF ORDINANCES § 45.200 (Dec. 18, 2019).

57. *Id.*

58. *Id.*

59. *Id.*

60. ALTUS, OKLA., CODE OF ORDINANCES § 44-11 (Mar. 4, 2020).

61. *Id.*

The town of Del City adopted a Code of Ordinance⁶² that addressed WECS. In Del City, WECS are not permitted except by application to the Board of Adjustment in the form of a variance, and the applicants will be required to provide an engineer's analysis.⁶³ Decibels emitted are to be no more than fifty-five, and there is a permit fee.⁶⁴ Limits on decibels are an important way to make WECS compatible with residential areas, as they basically protect neighboring residents from the perceived negative impacts of wind.

III. SOLAR

A. Legislators from Urban Districts Proposed Bills, but Clouds Got in the Way

Solar legislation in 2019 and 2020 centered on net metering and retail purchase concerns. Net metering allows small solar generators to sell electricity back to the grid. Democratic legislators were more likely to introduce such legislation. These legislators tend to represent the urban areas surrounding Oklahoma City and Tulsa. The bills introduced in the Oklahoma House and Senate related to utility billing procedures, producer and consumer rates, and solar energy valuation. The House also took up income tax credits, but, importantly, not a single bill related to solar energy advanced to a full vote. Even though the Oklahoma Solar Energy Act of 2020 was introduced via two house bills⁶⁵ by Representative Brewer, both failed to pass through committee.

Senator Boren of Oklahoma City represented producers' interests and introduced a bill.⁶⁶ Senator Boren's bill would have authorized compensation for producers of solar energy and established procedures for billing utility companies and cooperatives. The bill provided for a purchase agreement for producers to be compensated by the retail purchase meter running in reverse. Even though the bill was assigned to the energy committee, it failed to progress after its second reading.

62. DEL CITY, OKLA., CODE OF ORDINANCES § 5-143 (June 15, 2020).

63. *Id.*

64. *Id.*

65. H.B. 2858, 57th Leg., 2d Sess. (Okla. 2020); H.B. 3861, 57th Leg., 2d Sess. (Okla. 2020).

66. S.B. 529, 57th Leg., 1st Sess. (Okla. 2019).

Senator Scott introduced the Oklahoma Solar Value Act, which was designed for the valuation of solar energy⁶⁷ This bill failed to pass through committee. A nearly identical bill was introduced by Senator Boren.⁶⁸ These two bills directed the OCC to undertake a rulemaking concerning the value of solar energy. It would have enabled Oklahomans to benefit from the value of solar energy distributed generation resources including net metering and interconnection. The Commission was to consider recommendations arising out of studies performed by the National Renewable Energy Laboratory⁶⁹ as commissioned by the Oklahoma Office of Energy and Environment.

Representative Branham of Oklahoma City and Representative Brewer of Tulsa supported tax credits and aimed to protect consumers. Representative Branham introduced a bill that would have authorized an income tax credit for employees engaged in the installation of solar energy systems for taxable years beginning January 2021 and ending December 2025.⁷⁰ Representative Hill introduced a similar bill,⁷¹ and both measures failed. Representative Brewer introduced legislation seeking to codify the idea that “[n]o public utility shall increase rates charged or enforce a surcharge on the basis of the use or installation of a solar energy device by a consumer.” however, this bill also failed to pass through committee.⁷²

In the final analysis, Oklahoma legislators sought to introduce new solar acts and bills to protect consumers, but sadly, none of them were able to progress. Next year will see new introductions, and hopefully, some will proceed to a vote of the legislature.

B. The Regulator Supported Citizens’ Freedom to Choose Alternative Energy Sources

The OCC issued a public utility decision⁷³ In the Matter of the Application of Oklahoma Gas and Electric Co. for an Order of the Commission Approving Tariff Modifications to comply with OAC

67. S.B. 952, 57th Leg., 1st Sess. (Okla. 2019).

68. S.B. 526, 57th Leg., 1st Sess. (Okla. 2010); S.B. 529, 57th Leg., 1st Sess. (Okla. 2019).

69. *Solar Market Research and Analysis Publications*, NREL, <https://www.nrel.gov/solar/solar-market-publications.html> [<https://perma.cc/Z2C4-P6ZU>] (last visited Aug. 24, 2020).

70. H.B. 2933, 57th Leg., 2d Sess. (Okla. 2020).

71. H.B. 3112, 57th Leg., 2d Sess. (Okla. 2020).

72. H.B. 3865, 57th Leg., 2d Sess. (Okla. 2020).

73. 2019 Okla. PUC LEXIS 301 (Okla. Corp. Comm’n December 4, 2019).

165:40.⁷⁴ The Oklahoma Solar Association (“OSA”) filed an entry of appearance with a Motion of Statement of Position, but OG&E filed a Motion to Strike the Statement of Position of the OSA.⁷⁵ The Commission approved a stipulated agreement that included provisions to allow for cogeneration of less than 300 KW by producers generating renewable energy from wind, solar, or water.⁷⁶

Additionally, the OCC issued a decision⁷⁷ In the Matter of the Application of the Empire District Electric Company, a Kansas Corporation, for an Order Approving Tariff Modifications to comply with OAC 165:40. Attorneys representing the OSA advocated for distributed generation for solar to allow Oklahoma citizens’ individual freedom to choose their energy sources for security and resilience; deliver electricity during peak demand; and forestall the need to build “new, costly power plants, . . . to avoid transmission and distribution infrastructure costs, as well as reduce air pollution from fossil fuel-powered plants.”⁷⁸

Even though Empire District Electric (“Empire”) currently only has one customer, and even though that customer does not produce any excess energy, the OSA wanted to intervene to create a provision for increased interest for customers who may install solar systems in the future.⁷⁹ Specifically, the OSA encouraged Empire to adopt the Distributed Solar Interactive Valuation Model computation tool developed by the United States Department of Energy’s National Renewable Energy Laboratory (the “NREL Model”).⁸⁰ The OSA encouraged the OCC to consider requiring all electric service providers to utilize the NREL Model in estimating the value of distributed generation as the state contends with the emerging solar industry.⁸¹ Empire contemplated the purchase of energy via inductive wind generators in its purchase agreement.⁸²

Attorney General Mike Hunter submitted a brief in which he did not object to Empire’s modification of net metering tariffs considering distributed generation from solar photovoltaic technology, as well as

74. *Id.*; see generally OKLA. ADMIN. CODE § 165:40 (2020).

75. 2019 Okla. PUC LEXIS 301, *2-3. A hearing was held, where the Motion to Strike was denied.

76. *Id.* at *28.

77. 2019 Okla. PUC LEXIS 357 (Okla. Corp. Comm’n March 4, 2020).

78. *Id.* at *112.

79. *Id.* at *113–14.

80. *Id.* at *114.

81. *Id.* at *115.

82. *Id.* at *79.

wind and geothermal wells.⁸³ The Attorney General did request a change to the Optional Net Energy Bill Purchase Rate tariff to require Empire to pay out any credit balance once it reaches \$100.00.⁸⁴

Oklahoma is one of three states that received an “F” for its net-metering policy on the 2019 Solar Power Rankings Report by Solar Power Rocks—a solar research and advocacy group.⁸⁵ Oklahoma currently ranks sixth in solar potential but is ranked forty-sixth in its deployment of solar.⁸⁶ Oklahoma only has *voluntary* renewable energy portfolio standards (“RPS”).⁸⁷ States with mandatory RPS will offer solar incentives to homeowners, and thereby increase solar energy production.⁸⁸ Accordingly, Oklahoma’s failure to enact mandatory RPS suggests a lack of support in the state legislature for truly expanding solar energy. The authors speculate that resistance to an expansion of solar energy may be based in part in the strong influence of the oil and gas industry in the state of Oklahoma.

C. Cities Took Up Zoning and Permitting of Solar Power to Control Aesthetics

Several Oklahoma cities and towns undertook regulation of solar power within their boundary limits. In part to control aesthetics and property values, and in part to protect consumers, zoning and permitting were the avenues of choice. These municipalities included Oklahoma City, Chickasaw, Lawton, Del City, and Miami. The towns that enacted such ordinances ranged from cities comprising 650,000 residents to towns as small as 13,000.

Oklahoma City enacted a Code of Ordinance⁸⁹ to limit the location of solar panels so they are not located on the front wall of primary structures or located on the roof and visible from the street. This is a limit on solar for aesthetic purposes. In December, Oklahoma City

83. *Id.* at *121–23.

84. *Id.* at *123. The Commission approved of a recommendation of a Joint Stipulation and Settlement Agreement filed in February 2020 which included much of the recommendations of the OSA, as well as the Attorney General, after “robust settlement discussions involving all parties” including the OSA and the Attorney General. *Id.* at *110.

85. *Id.* at *113.

86. *Id.* at *112.

87. *Oklahoma – Energy Tax Credit, Solar Rebates and Incentives*, DASOLAR.COM, <https://www.dasolar.com/energytaxcredit-rebates-grants/oklahoma> [<https://perma.cc/QP9D-DKMR>] (last visited Jan. 15, 2020).

88. *Id.*

89. OKLA. CITY, OKLA. CODE OF ORDINANCES § 59-7300 CODE (2020).

also published a Mechanical Code,⁹⁰ which included new solar systems requirements.

Chickasaw adopted a City Ordinance⁹¹ that designated wind turbines and solar farms as “Allowable Special Uses” for the purpose of planning and zoning according to the commission and the city council. The town requires an application, a plot plan, and a site plan complete with architectural drawings. This controls the size of installations and forces users to participate in planning and zoning. Land use statutes and regulations are used under zoning to ensure that buildings are in character with the area. Such regulations are useful for protecting neighbors’ properties in the immediate vicinity of construction. Other cities enacted incidental solar permitting.⁹²

Miami, Oklahoma, was also concerned with net metering and therefore adopted a City Ordinance.⁹³ Customers must apply for a city permit and have the generating facility inspected before start-up. The size of the generating facility is limited to 100 KW, with a maximum excess amount of KWHs the customer can generate back to the city’s electric distribution system. This is basically a way to integrate solar into the grid while limiting the amount of production.

IV. CONCLUSION: ALBEIT A SLOW ACCELERATION, SMOOTH DRIVING AHEAD

Oklahoma has neither offered sales tax or property tax exemptions for solar power systems, nor has the state enacted rebates for the installation of solar energy systems.⁹⁴ Yet Oklahoma forbids electricity providers from charging rates beyond what is necessary to recover costs from customers who install energy-generating devices on the private side of the meter.⁹⁵ With limited net metering, Oklahoma allows solar generation to offset electricity drawn from the grid.⁹⁶

90. *Id.* § 29-3.

91. CHICKASHA, OKLA. MUNICIPAL CODE § 54-137 (2020).

92. Lawton enacted an Ordinance Code which limited external effects from fuel sources with the express exception of solar energy, while Del City, Oklahoma adopted a fee schedule authorizing a fee of \$100 for both electrical and plumbing permits for Solar Energy Systems. LAWTON, OKLA. CODE OF ORDINANCES § 18-6-15-665 (2020); DEL CITY, OKLA. CODE OF ORDINANCES § 5-184 (2020).

93. MIAMI, OKLA. CODE OF ORDINANCES § 24-62 (2020).

94. *Oklahoma – Energy Tax Credit, Solar Rebates and Incentives*, DASOLAR.COM, <https://www.dasolar.com/energytaxcredit-rebates-grants/oklahoma> [<https://perma.cc/QP9D-DKMR>].

95. OKLA. STAT. tit. 17, § 156(B) (2016).

96. *Oklahoma – Energy Tax Credit, Solar Rebates and Incentives*,

Oklahoma's electric rates rank thirty-seventh in the United States.⁹⁷ Lower electric rates make investing in solar power less attractive.⁹⁸ Oklahoma currently does not have any solar power rebates, solar income tax credits, solar performance-based incentives, solar property tax exemptions, or solar sales tax exemptions.⁹⁹ The costs of solar and wind power are dropping, and cost reductions will encourage investment in these technologies and result in lower prices that consumers will pay.¹⁰⁰ Solar and wind have a low-to-zero marginal variable cost, and both have proven to be the fastest growing energy production technologies.¹⁰¹

In a post-COVID-19 landscape, Oklahoma is poised to drive ahead with policies designed to embrace renewable, environmentally responsible energy sources like solar and wind power.¹⁰² As Oklahoma keeps its eyes on the road ahead, focusing forward, it will certainly see successes regarding renewable energy in its rearview mirror.

DASOLAR.COM, <https://www.dasolar.com/energytaxcredit-rebates-grants/oklahoma> [<https://perma.cc/QP9D-DKMR>] (last visited Jan. 15, 2020); OKLA. STAT. tit. 17, § 156.

97. *Renewable Energy Incentives*, DASOLAR.COM.

98. *Id.*

99. *Id.*

100. Rich Glick & Matthew Christiansen, *FERC and Climate Change*, 40 ENERGY L.J. 1, 7–8 (2019) (citing THE ECONOMIC VALUE OF RENEWABLE ENERGY IN TEXAS: REDUCING ENERGY COSTS FOR CUSTOMERS 2 (2018), (explaining that the total cost of electricity in ERCOT was \$ 5.7 billion lower between 2010 and 2017 as a result of wind and solar installations than it would have been otherwise, with roughly \$ 850 million of the savings in 2017); Joachim Seel *et al.*, *Impacts of High Variable Renewable Energy Futures on Wholesale Electricity Prices, and on Electric-Sector Decision Making*, vii (2018), https://eta-publications.lbl.gov/sites/default/files/report_pdf_0.pdf [<https://perma.cc/C74J-28ND>] (finding that increased levels of wind and solar resources should lead to lower average electricity prices, albeit potentially with more variability).

101. Glick & Christiansen, *supra* note 98, at 10, 13 (citing Michael Goggin *et al.*, *Customer Focused and Clean: Power Markets for the Future*, WIND SOLAR ALLIANCE 12 (2018), [https://windsolaralliance.org/wp-content/uploads/2018/11/WSA Market Reform report online.pdf](https://windsolaralliance.org/wp-content/uploads/2018/11/WSA_Market_Reform_report_online.pdf) [<https://perma.cc/X6RX-WYPZ>] (stating that frequency-related ancillary services will become more valuable as the percentage of electricity from wind and solar increases)).

102. Governor Stitt issued Executive Order 16 on March 25, 2020, where he designated employees who work in wind, solar, and like-electricity generating facilities to continue working since those energy facilities are critical infrastructure. He thus exempted them from closure in his effort to halt community spread of COVID-19. Okla. Exec. Order No. 2020-01 (Mar. 25, 2020), <https://www.sos.ok.gov/documents/executive/1921.pdf> [<https://perma.cc/3M4J-MS3T>].