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# Comments: Limiting Local Zoning Regulation of Electric Utilities: A Balanced Approach in the Public Interest

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# LIMITING LOCAL ZONING REGULATION OF ELECTRIC UTILITIES: A BALANCED APPROACH IN THE PUBLIC INTEREST

## I. INTRODUCTION

The electric power industry is one of the most heavily regulated industries in the United States. Together, the federal government and the fifty state governments exercise oversight in virtually every aspect of electric power generation, transmission and distribution, forming a web of regulation as expansive, complex and interconnected as the actual physical facilities that comprise the nation's electric power system. Over the course of the last half-century, the ample body of regulation created by statutes, case law and administrative decision making has received considerable attention from government officials, industry representatives, technical experts and scholars.

Yet, for two primary reasons, these same players have historically paid comparatively little attention to local regulation of the electric power industry. First, much potential subject matter for local regulation has been preempted, expressly or impliedly, by expansive federal and state regulatory activity in the field. Second, most counties, cities and other municipal governments have traditionally followed a laissez-faire approach with respect to matters relating to the actual physical facilities that are necessary to generate and provide electric power.

One particular area where the issue of local preemption generally remains unsettled involves the exercise of municipal zoning authority. As the public has awakened to concerns about the effects associated with the electric power industry's physical facilities, including, most recently, exposure to electromagnetic fields, municipalities have begun to assert their zoning authority more aggressively. Accordingly, a critical assessment of the use of local zoning laws to regulate the activities of the electric power industry is imperative.

Fundamentally, three approaches exist regarding the use of local zoning laws to control the location and operational characteristics of electric power industry facilities. First, state governments can continue to allow municipalities to regulate the electric power industry through the application of zoning laws, subject only to the constitutional and statutory limitations applicable to the generality of land uses. Second, state governments can completely preempt local zoning regulation of the electric industry. Third, state governments can limit application of local zoning laws by crafting a balance between regional needs

and the variable local considerations that zoning regulations are designed to address.

This Comment examines these three approaches in light of the unique operational and regulatory constraints affecting the electric power industry. As necessary background, this Comment begins by summarizing the power industry's physical characteristics and existing regulatory structure. Next, this Comment analyzes the inherent conflict between the power industry's operational and non-local regulatory framework, and the application of local zoning laws to the industry's physical facilities. As a part of this analysis, this Comment discusses judicial and legislative responses to past attempts by local governments to control the location of the power industry's infrastructure. Finally, this Comment concludes that the third approach, a balancing of statewide and local needs, best achieves the primary goals ideally attributable to both the electric power industry and local land use laws—the promotion of the public welfare and the protection of the public interest.

## II. AN OVERVIEW OF THE ELECTRIC POWER SYSTEM

In order to place the issue of local regulation of electric power industry facilities in a meaningful context, it is helpful to understand the basic structure, both physical and operational, of the electric power system.<sup>1</sup> As an industry, the generation and sale of electric power is unique in several aspects, including (1) the industry's massive infrastructure requirements, (2) the vital, detailed operational coordination and planning among individual utilities, and (3) the pervasive regulatory oversight exercised at the federal and state levels.<sup>2</sup>

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1. "The electric power industry is one of the most heavily regulated [industries in the United States,] with virtually all aspects of power generation, transmission, and distribution under the oversight of State and/or Federal agencies." U.S. CONGRESS, OFFICE OF TECHNOLOGY ASSESSMENT, *ELECTRIC POWER WHEELING AND DEALING: TECHNOLOGICAL CONSIDERATIONS FOR INCREASING COMPETITION* 53, OTA-E-409 (1989) (hereinafter *OTA REPORT*). Although numerically most electric power utilities are publicly owned, this Comment focuses on investor-owned utilities, because (1) investor-owned utilities provide most of the nation's electric energy, *see infra* note 4, and (2) investor-owned utilities do not qualify for the additional immunity from zoning regulations to which publicly owned utilities may be entitled, *see infra* notes 111-17 and accompanying text.
  2. W.S. White, Jr. & Gregory S. Vassell, *U.S. Electric Power Supply at the Crossroads—The Technical and Historical Background*, PUB. UTIL. FORT., Jan. 5, 1989, at 9. As explained by the authors,  
[n]o other industry is called upon to meet such a stringent standard of availability and continuity of service as is the electric power supply industry. This is so even for such public service industries as transportation and communication: An airline limits an aircraft's passen-

In most urban environments in the United States, electric industry facilities are so ubiquitous that they go unnoticed. Poles, wires, cross-arms, transformers, capacitors and similar infrastructure unconsciously blend into the background of the urban landscape, along with undistinguished building facades, street signs, billboards, traffic markings, highway barriers and the blur of the morning commute. Ordinarily, most people pay little attention to the fact that we are literally surrounded by a whirring network of energy distribution in our homes, offices, factories, schools and theaters. Only when visiting the countryside, where nature still provides a sufficient visual juxtaposition to man-made forms, is one's attention usually drawn to the harsh skeleton of the electric power system's physical presence. Similarly, only when a disruption in electric service occurs do most people give any thought to the operation of that service, and to the issue of how essential electricity is to the ability of society to function.<sup>3</sup>

The magnitude of the electric power system in the United States is nothing short of stunning.<sup>4</sup> In the last fifty years, production and

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gers to the seating capacity that is available and a telephone system prevents overloading of its circuits by busy signals. In the electric power supply industry, however, the consumer controls the time and the level of use of the product by the flick of a switch. In this industry, there can be no rejection of patronage or delay in providing the service. The capability to serve must be already in place, having been planned for many years in advance.

*Id.* at 10.

3. See *id.* ("The availability of a continuous and uninterrupted electric power supply is regarded by most people in our society as a necessity, if not, indeed, a fundamental right.")
4. Annually, electric power producers provide over 100 million homes, office buildings, shopping centers and industrial operations with more than 2.5 trillion kilowatthours (kWh) of electricity. OTA REPORT, *supra* note 1, at 35-36. Investor-owned electric utilities, which numerically account for about 6% of the electric power generators in the United States, serve 75% of the nation's retail customers, and provide 76% of the nation's electric power. *Id.* at 35. In 1987, for example, investor-owned utilities produced 2,022,260 kWh of the total 2,572,128 kWh produced in the United States. *Id.* at 36. Today, over 200 investor-owned electric utilities represent the consolidation of some 2,000 private utilities that existed 70 years ago. *Id.* at 35. About 25% of the remaining investor-owned utilities are subsidiaries of just nine registered electric utility holding companies regulated by the federal Public Utility Holding Act of 1935 (presently codified as 15 U.S.C. §§ 79 to 79z-6 (1988)). *Id.* In addition to the nine registered holding companies, several other "exempt" holding companies exist. *Id.*

Installed generating capacity at investor-owned utilities exceeds 550,000 megawatts (MW), out of a total of nearly 720,000 MW for the approximately 3,200 electric utility power generators in the United States. *Id.* at 35-36. Non-utility generators had the capacity to produce approximately 25,000 MW of power as of 1987. *Id.* at 40. This figure has no doubt grown in the last five

use of electricity has increased more than forty-four fold, with a concomitant expansion of the physical facilities required to generate, transmit and distribute electric energy.<sup>5</sup> From 1978 through 1988, the electric industry spent about \$370 billion for new facilities, with annual capital expenditures ranging from about \$26 billion to \$40 billion.<sup>6</sup>

A. *Physical Attributes of the Electric Power System*

Generating units produce electric power from one or more sources of energy, including fuels such as coal, natural gas, oil, and nuclear materials, and renewable energy sources such as water, wind, and solar energy.<sup>7</sup> All generating units in an interconnected system must be precisely synchronized in terms of the frequency of electric energy produced, which in the United States is typically sixty cycles per second, or sixty Hertz, alternating current.<sup>8</sup> Voltages at the power generation stage range between twelve and thirty kilovolts (kV).<sup>9</sup>

Transmission lines, often referred to as high-voltage transmission lines, carry electricity from power generating plants to area distri-

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years as a result of federal incentives for cogeneration of electricity. *See id.* at 46-47 (filings for cogeneration "qualifying facilities" grew from 29 in 1980 to a cumulative total of 3,717 by the end of 1987). One estimate is that non-utility generators of electric power will have the capacity to produce up to 80,000 MW by the year 2000. *Id.* at 47. These figures are all the more striking considering the humble beginnings of the electric power industry just about a century ago, when in 1882 Thomas Edison's Pearl Street station became operational to supply power to a few hundred light bulbs in Manhattan. White & Vassell, *supra* note 2, at 11.

5. White & Vassell, *supra* note 2, at 11. The "driving force behind th[e] phenomenal growth" of the nation's electric power supply system is attributable to "[t]he technical achievements of the U.S. electric power industry . . . in the engineering, design, and manufacture of electrical apparatus and equipment; in the production, transmission, and distribution of electric energy; and in the planning and operation of highly interconnected and coordinated electric power systems for overall reliability and economy." *Id.* at 11-12.
6. OTA REPORT, *supra* note 1, at 45-46. Capital expenditures pay for the industry's basic physical components, including generating units, transmission lines, distribution lines, and substations. *Id.* at 10. Average annual capital spending by electric utilities has declined since 1988, largely as a result of reduced spending for new generating plants. *Id.* at 46. But spending by cogenerators and other small power producers has been increasing. *Id.* Moreover, in order to retire old, inefficient generating units, and to meet new demand in high growth regions, as much as 150,000 MW of new generating capacity will be needed in the next 10 years. Joseph P. Tomain, *Electricity and the Environment*, PUB. UTIL. FORT., July 5, 1990, at 34. The investment required for this new generating capacity will exceed \$100 billion in capital financing and \$200 billion in acquisition of long-term fuel supply. *Id.*
7. OTA REPORT, *supra* note 1, at 40-41.
8. *Id.* at 10.
9. *Id.*

bution networks. Before being transported by a transmission line, electricity produced by a generating unit is passed through a step-up transformer, which increases the voltage to match the design of the transmission line, usually between 69 kV to 765 kV.<sup>10</sup> Approximately 620,000 circuit miles of high-voltage transmission lines are presently used nationwide.<sup>11</sup>

Distribution lines come in two basic types: primary distribution lines (primaries), and secondary distribution lines (secondaries).<sup>12</sup> Transmission line voltage is decreased, or stepped-down, at substations to between five kV and thirty-five kV to allow electricity to be carried by primaries, which usually serve various neighborhoods linked in a distribution system.<sup>13</sup> Smaller transformers, often located on electric poles, step-down voltage even further so that secondaries can deliver electricity to individual users at typical household voltages of 115/230 volts.<sup>14</sup> Most primaries and many secondaries are located above ground, although secondaries in new neighborhoods are often located below ground.<sup>15</sup>

Substations consist of transformers and related equipment designed either to step-up voltage for transmission or to step-down voltage for distribution.<sup>16</sup> Substations thus serve as vital links in the overall electric power system. Substations that step-up voltage are usually located at power generating plants.<sup>17</sup> Substations that step-down voltage are far more numerous than step-up substations; every community usually will have at least one step-down substation, in

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10. *Id.*

11. EDISON ELECTRIC INSTITUTE, STATISTICAL YEARBOOK OF THE ELECTRIC UTILITY INDUSTRY, 1987, at 6 (1988).

12. M. GRANGER MORGAN, CARNEGIE MELLON U., ELECTRIC AND MAGNETIC FIELDS FROM 60 HERTZ ELECTRIC POWER: WHAT DO WE KNOW ABOUT POSSIBLE HEALTH RISKS? 11 (1989).

13. *Id.*

14. *Id.* Many distribution and transmission lines, are arrayed with three "hot" wires, which correspond to the three "phases" of the 60 Hertz oscillations of alternating electric current. *Id.* at 42. The three wires effectively work together as one distribution "line." *Id.* Use of three-phase power allows for more efficient transmission of electric energy than single-phase power. *Id.* Industrial and large commercial consumers of electricity may use three-phase power directly to operate large motors and other heavy equipment; however, the 115-volt power typically supplied to a residential consumer generally comes from just one of the three phases. *Id.* at 11. Therefore, in order to balance the power load among the three phases of the distribution line, electric utilities must connect equal numbers of residential units to each phase. *Id.*

15. OTA REPORT, *supra* note 1, at 10; *see infra* notes 85-87 and accompanying text.

16. MORGAN, *supra* note 12, at 11.

17. *See* U.S. CONGRESS OFFICE OF TECHNOLOGY ASSESSMENT, BIOLOGICAL EFFECTS OF POWER FREQUENCY ELECTRIC AND MAGNETIC FIELDS—BACKGROUND PAPER 4-5, OTA-BP-E-53 (1989).

addition to numerous pole transformers.<sup>18</sup> Utility companies generally attempt to locate step-down substations in the center of the load demand which a particular substation is designed to serve.<sup>19</sup> Centrally locating substations increases both the efficiency and reliability of electric service for local consumers, and for the utility's overall, interconnected electric power network.<sup>20</sup>

### B. Operational Characteristics of the Electric Power System

Just as the electric transmission and distribution facilities serving the numerous communities within a utility's franchise area are interconnected, each utility as a whole is interconnected with other utilities throughout a "control area," and, ultimately, throughout an "interconnection" network.<sup>21</sup> The three interconnection networks that operate in the United States<sup>22</sup> are divided into 143 control areas.<sup>23</sup> Each control area is responsible for the operation of electric generating

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18. *See id.*

19. *See Fischer v. Iowa State Commerce Comm'n*, 368 N.W.2d 88, 98 (Iowa 1985) (upholding utility company's siting decision despite availability of alternative sites for substation, because selected location "was reasonable based upon location of the load center of the area to be served").

20. *See id.* (finding substation location reasonable because location selected required shortest distance along property division lines to connect to supplying transmission line); *County Council for Prince George's County v. Potomac Elec. Power Co.*, 263 Md. 159, 164, 282 A.2d 113, 115 (1971) (citing testimony that power company selected substation site in part due to proximity to existing transmission lines).

21. *See OTA REPORT*, *supra* note 1, at 36-37. Within control areas, or among control areas within the same interconnection network, utilities may join "power pool" arrangements. *Id.* at 37. Such arrangements may involve the utility in a "tight power pool" or a "loose power pool." Tight power pools are "highly interconnected, centrally dispatched, and have established arrangements for joint planning on a single-system basis." *Id.* Nine tight power pools have formed. Four of the tight power pools consist of utility holding companies with operations in more than one state; one is made up of a holding company with operations only in Texas, and the remainder consist of multi-utility pools. *Id.* Obligations among the utilities participating in loose utility pools "are quite varied and range from generalized agreements that coordinate generation and transmission planning to accommodate overall needs to more structured arrangements for interchanges, shared reserve capacity, and transmission services." *Id.*

22. The interconnected electric utilities in the United States are comprised of three separate interconnection networks: (1) The Eastern, or Seven Council, Interconnection, (2) the Western Systems Coordinating Council, and (3) the Texas Interconnection. *Id.* at 36.

23. *Id.* at 37-38. The Eastern Interconnection is divided into approximately 99 control areas, the Western Interconnected System into approximately 34 control areas, and the Texas Interconnected System into 10 control areas. *Id.* at 38. A control area may be composed of a single electric utility, or two or more utilities in a contractual relationship. *Id.* at 37.

and transmission facilities within the control area's boundaries, whether the facilities belong to one or several different electric utilities.<sup>24</sup> A particular control area must assure that its own internal electric generation matches its load demand, and also must account for power exports and imports from other control areas.<sup>25</sup> Because control areas are interconnected, operating requirements for the control areas, including power generation, frequency control and line flows, are more stringent than for an isolated system.<sup>26</sup> More stringent operating requirements in turn necessitate frequent communication and coordination among control areas in the interconnected system about matters such as operating conditions, incremental costs, and transmission line loadings.<sup>27</sup>

The elaborate interconnected systems that make up the nation's electric power supply did not develop by happenstance. Rather, the design of the power supply system, from single-phase secondary distribution lines to interconnected regional grids, was in large part driven by the laws of nature.<sup>28</sup> Two fundamental physical properties of electricity are overriding. First, electric energy travels nearly at the speed of light, meaning that there is virtually no storage capacity in the electric transmission and distribution system.<sup>29</sup> Accordingly, electricity must be generated as it is needed. To balance supply with demand on a moment-by-moment basis, utilities employ a process of automatic generation control.<sup>30</sup> Utilities also must plan to bring generating units on-line and off-line to match the daily load cycle.<sup>31</sup> The inability to store electric power in the transmission system

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24. *Id.* Stated otherwise, all utilities in a control area are managed to meet load demands as if they were one system.

25. *Id.* Control areas that include more than one electric utility typically utilize a "central dispatch" process, whereby costs are minimized by managing the generating facilities of several utilities to meet system load demands, even if the demand increase arises in the franchise area of only one utility. *Id.*

26. *Id.* From an operational perspective, control areas are the smallest units of the interconnected system. *Id.*

27. *Id.* at 38.

28. *See id.* at 12 ("The bulk power system . . . must be designed and operated according to certain physical principles of electricity.").

29. *Id.* Separate from the power distribution system itself, certain hydroelectric facilities are designed to store energy, but cannot store electricity. *Id.* at 12 n.6. In effect, such facilities are merely another type of electricity generator. Electricity storage will remain inconsequential until the development of an economic battery or a magnetic storage capacity. *Id.*

30. *Id.* at 12. Typically, a variety of generating units are operating at any one time, with a variety of production costs and operating characteristics. *Id.* The focus for the utility is to implement "economic dispatch," which assures that the mix of units operating comprises the least-costly combination. *Id.*

31. *Id.*



requires that utilities maintain a significant back-up generating and transmission capacity in the event of equipment failure.<sup>32</sup>

Second, electric energy is not uni-directional—once electricity is sent into the power system it will move along all available paths.<sup>33</sup> Because electricity is not uni-directional, “every flow of power from a power plant to a distribution system affects the entire transmission network, not just the most direct path.”<sup>34</sup> Accordingly, the transfer capacity of an overall transmission system can be no greater than the single most limiting transmission line in the system.<sup>35</sup>

### III. THE REGULATORY STRUCTURE OF THE ELECTRIC POWER INDUSTRY

Similar to other industries, the electric power industry must cope with a wide range of laws and administrative regulations, including those that address employment practices, environmental impacts, worker health and safety, and financial dealings. In addition to general business regulations, however, electric power utilities are subject to the extensive oversight reserved for enterprises that are classified as public utilities. Public utility oversight occurs at both the federal and state levels.

#### A. *The Public Utility Concept*

From the birth of the electric power industry, “it was recognized that the supply of electric power and energy to the public at large is ‘affected with the public interest,’ because of the essential nature of the service involved.”<sup>36</sup> Because of the vast infrastructure needed to distribute electricity and the corresponding waste that would result from two or more businesses competing to serve the same geographical area, electric power companies began to be recognized as “natural monopolies.”<sup>37</sup> Together, the two concepts of public interest and

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32. *Id.*

33. *Id.*

34. *Id.*

35. *Id.* Determining whether a transmission system has the capacity to accommodate an additional transfer of electricity “often requires considerable engineering expertise, data, and analysis, and it is possible for different analysts to arrive at opposite conclusions.” *Id.* at 14. An individual transmission line is subject to a variety of capacity constraints, including overheating caused by excessive current, equipment arcing caused by high voltage, the line’s specific configuration, and variables such as air temperature. *Id.*

36. White & Vassell, *supra* note 2, at 12.

37. *Id.*

natural monopolies gave rise to a unique "regulatory compact" that in turn defined the public utility concept.<sup>38</sup>

Both the concept of a public utility<sup>39</sup> and the regulatory compact involve a symbiotic relationship between obligations and rights.<sup>40</sup> In general, a public utility shoulders an obligation (1) to serve all customers located in its service area; (2) to serve all customers on equal terms without unreasonable discrimination; (3) to render safe and adequate service, including planning for foreseeable increases in demand; and (4) to charge a "just and reasonable price" for its products and services.<sup>41</sup>

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38. *Id.* White and Vassell describe the development of the electric utility regulatory compact as follows:

So as to avoid wasteful competition . . . while at the same time protecting the consumer from exorbitant prices for electric service . . . a regulatory scheme . . . evolved in this country whereby electric power companies became subject to overview by *regulatory commissions* with respect to the adequacy and cost of their service. Under this regulatory scheme, electric utilities accepted the *obligation to serve* any customer in their certified service area and a limitation on rates of return on their investment dedicated to public service, in return for [a] regulatory promise that they would have the opportunity—not the guarantee—to earn a *fair* return on such investment. This "*regulatory compact*" worked quite well for both consumers and electric utilities for many years . . . .

*Id.*

39. Federal and state laws classify any company selling electricity as a public utility. *See, e.g.*, 15 U.S.C. § 79b(a)(3) (1988) (Public Utility Holding Company Act defines "electric utility company" as "any company which owns or operates facilities used for the generation, transmission, or distribution of electric energy for sale"); 16 U.S.C. § 796(22) (1988) (Federal Power Act defines an electric utility as "any person or State agency [including any municipality] which sells electric energy"); MD. ANN. CODE art. 78, § 2(f) (1991) ("Electric company" means and includes any public service company, other than a company generating and/or transmitting electricity exclusively for its own use, (1) which (A) owns any electric plant and (B) transmits, sells, or distributes electricity, or generates electricity for distribution or sale . . . .").
40. *See* 73B C.J.S. *Public Utilities* § 4 (1983) ("Corporations engaging in a public or quasi-public occupation enjoy privileges that individuals cannot have, but they have duties which tend to the public welfare, and the whole scheme of laws is to equip and control them as instruments for the public good.").
41. CHARLES F. PHILLIPS, JR., *THE REGULATION OF PUBLIC UTILITIES: THEORY AND PRACTICE* 106 (1984); *see, e.g.*, 16 U.S.C. § 824d(a) (1988) ("All rates and charges made, demanded, or received by any public utility . . . shall be just and reasonable, and any such rate or charge that is not just and reasonable is hereby declared to be unlawful."); *id.* § 824d(b) ("No public utility shall, with respect to any transmission or sale . . . (1) make or grant any undue preference or advantage to any person or subject any person to any undue prejudice or disadvantage, or (2) maintain any unreasonable difference in rates, charges, service, facilities, or in any other respect, either as between localities or as between classes of service."); ALASKA STAT. § 42.05.291(a) (1989) ("adequate,

In return for undertaking these obligations, a public utility obtains the benefits of certain rights under the law, including the right to (1) reasonable compensation for its products and services, which includes the right to an opportunity for fair return on investment; (2) be free from competition within an identified service or franchise area; (3) run its business affairs subject to reasonable regulation; and (4) take private property, after paying just compensation to the owner, when necessary to provide adequate service.<sup>42</sup>

### B. Federal Regulation of the Electric Power Industry

In 1927 the Supreme Court determined that the Commerce Clause of the United States Constitution prohibited state regulatory agencies from establishing rates for electricity sold across state lines.<sup>43</sup> Because lawmakers perceived this ruling as creating a gap in the effective regulation of electric utilities, Congress acted to formalize a strong federal role in the regulation of interstate activities involving the transmission and sale of electric energy by adopting the Public Utility Act of 1935.<sup>44</sup>

Initially, the federal role in regulating electric energy transmission merely supplemented state regulation;<sup>45</sup> however, two factors combined to make the federal role predominant. First, in a line of cases beginning with *NLRB v. Jones & Laughlin Steel Corp.*,<sup>46</sup> the Supreme Court significantly expanded federal power under the Commerce Clause.<sup>47</sup> Second, long distance transmission of electric energy increased, multiplying the interconnections among electric utilities in

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efficient and safe service and facilities"); MD. ANN. CODE art. 78, § 26(a) (1991) (no preferences or discrimination); *id.* § 28(c) ("safe, adequate, just, reasonable, economical and efficient" service); *id.* § 28(d) (just and reasonable rates); *see also* 73B C.J.S. *Public Utilities* § 7 (1983) ("As a general rule, a public utility has the duty to give the public reasonable and adequate service at reasonable rates and without delay.").

42. PHILLIPS, *supra* note 41, at 107. For examples of eminent domain authority granted by states to electric utilities see CAL. PUB. UTIL. CODE § 612 (West 1975); GA. CODE ANN. § 22-3-20 (1982); IND. CODE ANN. § 8-1-8-1 (Burns 1991); N.J. STAT. ANN. §§ 48:3-17.6 to -17.8, 48:7-3.1, -8 (West 1969 & Supp. 1993); VA. CODE ANN. § 56-260 (Michie 1986); WIS. STAT. ANN. §§ 32.02(5)-(6) (West 1989).
43. *Public Utilities Comm'n v. Attleboro Steam & Elec. Co.*, 273 U.S. 83, 89-90 (1927).
44. OTA REPORT, *supra* note 1, at 54. The Public Utility Act of 1935 is presently codified as part of the Federal Power Act. *See* 16 U.S.C. § 791a (1988).
45. OTA REPORT, *supra* note 1, at 54.
46. 301 U.S. 1 (1937).
47. Important Commerce Clause cases following *Jones & Laughlin* include *United States v. Darby*, 312 U.S. 100 (1941), and *Wickard v. Filburn*, 317 U.S. 111 (1942).

different states.<sup>48</sup> As a result, the interstate commerce characteristic of electricity transmission became ascendant, and electricity transmission generally became subject to exclusive federal control.<sup>49</sup>

The principal federal agency regulating electric utilities today is the Federal Energy Regulatory Commission (FERC). FERC is administratively part of the Department of Energy, but operates as an independent commission deriving most of its regulatory authority from the Federal Power Act.<sup>50</sup> FERC's authority includes regulation of the wholesale transmission and sale of electricity,<sup>51</sup> the sales and mergers of electric utilities,<sup>52</sup> the issuance of securities and other indebtedness by electric utilities,<sup>53</sup> electric utility power pools and interconnection agreements,<sup>54</sup> and nonfederal hydroelectric projects constructed on navigable waters.<sup>55</sup>

Under the Public Utilities Regulatory Policy Act of 1978 (PURPA),<sup>56</sup> Congress broadened FERC's responsibilities in order to promote electric power cogeneration and small power production using alternative energy technologies.<sup>57</sup> PURPA vests FERC with the authority to require electric utilities to interconnect and operate in parallel with cogenerators and small producers, and to purchase electricity from and sell back-up electricity to such qualifying facilities.<sup>58</sup> PURPA also exempts qualifying facilities from various state

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48. OTA REPORT, *supra* note 1, at 54.

49. *Id.*; *see, e.g.*, Federal Power Comm'n v. Southern Cal. Edison Co., 376 U.S. 205, 213-16 (1964) (Federal Power Commission jurisdiction is plenary and extends to all wholesale sales of power in interstate commerce); Florida Power & Light Co., 29 F.E.R.C. 61, 140 (1984) (FERC asserts exclusive federal jurisdiction over nearly all electric energy transmission service in Florida), *available in* 1984 FERC LEXIS 664. Federal jurisdiction over electric utilities in Alaska, Hawaii, and parts of Texas is limited, however, because the power systems in those areas are not synchronously connected to power systems in other states. OTA REPORT, *supra* note 1, at 54.

50. The Federal Power Act is codified at 16 U.S.C. §§ 791(a)-825(r) (1988).

51. 16 U.S.C. §§ 824(a), 824(d)-824(e) (1988); *see id.* § 824f (if upon complaint by a state utility commission, FERC "shall find that any interstate service of any public utility is inadequate or insufficient, the [FERC] shall determine the proper, adequate, or sufficient service to be furnished, and shall fix the same by its order, rule, or regulation").

52. *Id.* § 824(b).

53. *Id.* § 824(c).

54. *Id.* §§ 824(a)(1), 824(b), 824(i). FERC has the authority to "exempt electric utilities, in whole or in part, from any provision of State law, or from any State rule or regulation, which prohibits or prevents the voluntary coordination of electric utilities, including any agreement for central dispatch." *Id.* § 824(a)(1).

55. *Id.* § 797.

56. Pub. L. No. 95-617, 92 Stat. 3117 (1978) (codified in various portions of the United States Code).

57. OTA REPORT, *supra* note 1, at 55.

58. 16 U.S.C. §§ 824(i)-824(k) (1988).

laws and regulations in order to reduce regulatory barriers that may hinder development of non-utility sources of electric power.<sup>59</sup>

In addition to FERC, the Securities and Exchange Commission (SEC) plays a significant role in federal regulation of the electric power industry through its authority over the structure, finances and operations of public utility holding companies.<sup>60</sup> The SEC's authority is derived from the Public Utility Holding Company Act of 1935.<sup>61</sup> Under the Act, a public utility holding company is any company that controls more than ten percent of the voting securities of an electric public utility.<sup>62</sup> Exemptions are available for certain companies that effectively meet the public utility holding company definition in name only, and for companies that own holdings in utility facilities operating in a one-state or limited contiguous-state area.<sup>63</sup> All other holding companies must become registered holding companies subject to detailed SEC scrutiny, and also must conduct operations as "a single interconnected and coordinated [public utility] system."<sup>64</sup>

### C. State Regulation of the Electric Power Industry

State regulation of the electric power industry is probably more familiar to the individual consumer than is federal regulation because all states regulate the retail price of electricity.<sup>65</sup> Beyond establishing rates and other charges, however, the scope and mechanics of state regulation of electric utilities is varied. Typically, states assign primary responsibility for the oversight of electric utilities to a public service commission, a public utilities commission, or a similar regulatory agency.<sup>66</sup> Commissions in many states have regulatory authority over all electric utilities operating in the state.<sup>67</sup> Other states limit com-

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59. *Id.* § 824(a)-3(e) (1988 & Supp. 1992).

60. OTA REPORT, *supra* note 1, at 56.

61. Act of Aug. 26, 1935, ch. 687, 49 Stat. 803 (1935) (presently codified at 15 U.S.C. §§ 79 to 79z-6 (1988)). This Act was part of the New Deal legislation originally aimed at a handful of holding companies that, by 1932, controlled over 75% of all private electric utilities nationwide. OTA REPORT, *supra* note 1, at 56. Such nationwide control, coupled with the complex corporate structures and business arrangements among these holding companies, frustrated state oversight, and resulted in the weakening or the filing of bankruptcy by a number of local electric utilities. *Id.*

62. 15 U.S.C. § 79b(a)(7) (1988). For the definition of "[e]lectric utility company" under the Act, see *supra* note 39.

63. 15 U.S.C. § 79c(a) (1988).

64. *Id.* § 79b(a)(29)(A); see also *id.* §§ 79c-79q.

65. OTA REPORT, *supra* note 1, at 57; see, e.g., MD. ANN. CODE art. 78, §§ 27-28 (1991) (regulating rates and charges and establishing affirmative duties of public service companies).

66. See, e.g., MD. ANN. CODE art. 78, § 3 (1991) (establishing public service commission).

67. OTA REPORT, *supra* note 1, at 56.

mission authority to the regulation of investor-owned utilities, allowing municipally owned systems and/or electric cooperatives to escape much regulatory oversight.<sup>68</sup>

Through the grant of exclusive service or franchise areas, state and sometimes local governments control entry into the electric power industry.<sup>69</sup> Government control is also exercised over the purchase of new capital facilities and the construction of utility infrastructure, usually through the requirement that a regulated utility obtain governmental approval, such as a certificate of public convenience and necessity.<sup>70</sup> Some states also regulate long-range utility planning of new capital facilities and infrastructure.<sup>71</sup> Long-range planning control may also extend to determinations about future resource requirements and demand forecasting.<sup>72</sup>

In the last twenty years, many states have adopted laws emphasizing energy conservation, with goals and standards affecting electric utilities and other enterprises such as the construction industry.<sup>73</sup> A significant number of states have specific laws governing the siting of utility facilities, particularly power generating plants and associated transmission lines.<sup>74</sup> Some states also regulate a variety of business

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68. *Id.* at 56-57.

69. *Id.* at 57; *see, e.g.*, MD. ANN. CODE art. 78, § 24 (1991 & Supp. 1992); *cf.* N.J. STAT. ANN. § 48:7-5 (West 1969) (determination of disputes as to territories served).

70. OTA REPORT, *supra* note 1, at 57; *see, e.g.*, MD. ANN. CODE art. 78, § 54A (1991) (requiring certificate approval for power plants and transmission lines carrying a voltage in excess of 69 kV).

71. OTA REPORT, *supra* note 1, at 57; *see, e.g.*, MD. ANN. CODE art. 78, § 54B(b) (1991) (commission responsible for annual evaluation of long-range plans of Maryland's public electric utilities).

72. OTA REPORT, *supra* note 1, at 57.

73. *See* White & Vassell, *supra* note 2, at 12-13. The authors discuss the significant changes in the electric power industry that date from the Arab oil embargo of 1973-74, including the dramatic cost increase of fuels used to generate electric energy, inflation, more stringent environmental laws, and slower overall real economic growth. *Id.* All of these factors are reasons to promote energy conservation.

In Maryland, for example, the Public Service Commission is required to "evaluate the cost-effectiveness of the utilities' investment in energy conservation to reduce electrical demand and in renewable energy sources to help meet electrical demand." MD. ANN. CODE art. 78, § 54B(b)(2) (1991). In addition, the Maryland Energy Conservation Building Standards Act requires compliance with the latest edition of the Building Officials' and Code Administrators' (BOCA) Energy Code, and prohibits electric utilities from serving any new building unless the builder has filed a certificate of compliance with the utility. *Id.* § 54J.

74. OTA REPORT, *supra* note 1, at 57; *see, e.g.*, MD. ANN. CODE art. 78, § 54B (1991 & Supp. 1992) (consolidated public hearings and notice to landowners); MD. CODE ANN., NAT. RES. § 3-305 (Supp. 1993) (state purchase of power plant sites).

details, such as customer security deposits,<sup>75</sup> customer late charges,<sup>76</sup> failure to pay utility charges,<sup>77</sup> and utility stock offerings and other corporate indebtedness.<sup>78</sup>

#### IV. LOCAL ZONING AND LAND USE REGULATION

Unlike the federal law that created FERC and state laws creating public utility commissions, zoning laws are not specifically designed to address the electric power industry. In their simplest form, zoning laws are designed "to ensure that commercial and industrial development [i]s segregated from residential areas."<sup>79</sup> As the Supreme

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75. See, e.g., MD. ANN. CODE art. 78, § 27A (1991) (Public Service Commission shall prohibit utilities from requiring security deposits for elderly customers); MICH. COMP. LAWS ANN. § 460.651 (West 1991) (ratepayer may be required to pay deposit as guarantee for payment of utility service).

76. See, e.g., MD. ANN. CODE art. 78, § 54C (1991) (late charges shall be uniform and not exceed 5% of balance owed); MASS. GEN. LAWS ANN. ch. 164, § 94D (West 1976 & Supp. 1993) (no penalty charges until 55 days from date of bill).

77. See, e.g., MD. ANN. CODE art. 78, § 54K (1991) (termination of service to low-income customers); MASS. GEN. LAWS ANN. ch. 164, §§ 124, 124A-124H (West 1976 & Supp. 1993); N.J. STAT. ANN. § 48:3-3.1 (West 1969) (refusal to furnish service due to nonpayment by previous occupant).

78. See, e.g., MD. ANN. CODE art. 78, § 24 (1991 & Supp. 1992); MASS. GEN. LAWS ANN. ch. 164, § 14 (West Supp. 1993); MICH. COMP. LAWS ANN. § 460.301 (West 1991); N.J. STAT. ANN. §§ 48:3-9, -10 (West 1969 & Supp. 1993). At least one state prohibits public utilities from making political campaign contributions. See N.J. STAT. ANN. § 19:34-45 (West 1989).

79. INTERNATIONAL CITY MANAGEMENT ASS'N, THE PRACTICE OF LOCAL GOVERNMENT PLANNING 416 (Frank S. So, et al. eds., 1979). Zoning ordinances achieve segregation of land uses by dividing a municipality into various zones or districts, which are thereafter reflected on a zoning map that is adopted along with a zoning text. *Id.* at 421-22. The zoning text establishes which land uses are permitted in which districts, as well as development standards such as lot size, lot width, building height, building setbacks, maximum lot coverage, sign controls, the amount of off-street parking required, and minimum yards, open spaces and buffers. *Id.* at 423-31.

In theory, zoning ordinances are intended to work in conjunction with other laws, such as subdivision regulations, in order to implement a community's comprehensive plan. *Id.* at 419-21. The comprehensive plan is typically a set of long-range goals, policies, and objectives for the physical development of a community, and is intended to operate as a guide for community decision makers. *Id.* at 153-54. Elements of a comprehensive plan go beyond the mere segregation of land uses, addressing areas such as transportation, public utilities and services, recreation and open space, housing, social services, natural resources, and economic development. *Id.* at 179.

In practice, the potential to use zoning ordinances to implement comprehensive plans has been largely ignored. *Id.* at 419. Instead of using zoning in an attempt to create an integrated and planned framework for regulating land uses, most communities simply have continued to make case-by-case decisions about physical development issues and to focus upon the segregation of land

Court commented when it first determined that comprehensive zoning ordinances were facially constitutional, “[a] nuisance may be merely a right thing in the wrong place, like a pig in the parlor instead of the barnyard.”<sup>80</sup>

The primary focus upon segregation of land uses perhaps explains why early zoning ordinances either did not regulate electric utility facilities or regulated them in a “relaxed” manner.<sup>81</sup> With the possible exception of power generating plants, electric utility facilities cannot be segregated from residential areas if the residences in those areas are to be served with electricity. At least a little bit of the nuisance must extend through every neighborhood and to every lot and building.

One of the ways in which early zoning ordinances addressed electric utility facilities was, in effect, not to regulate such facilities. Some ordinances expressly exempted utility facilities from the same type of regulation to which most other land uses were subject. Other ordinances affected a de facto exemption by allowing public utility facilities in all zoning districts as permitted uses.<sup>82</sup>

As ordinances grew more sophisticated, local governing bodies began to distinguish between electric utility facilities that were considered essential to residential areas, and facilities that could be restricted to nonresidential districts without apparent impact on the ability of a utility to provide service. Local governing bodies also began to make use of discretionary zoning approval mechanisms, such as the special exception or conditional use.<sup>83</sup>

#### A. *Essential Versus Nonessential Services*

As a practical matter, in order for zoning ordinances to regulate electric utility facilities at all, local governing bodies recognize a category of uses that are effectively exempt from zoning regulation. This category of uses is typically referred to as essential service uses.<sup>84</sup>

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uses. *Cf. id.* (“Without a conscious planning policy [zoning] decisions were, more often than not, bound to be inconsistent, [resulting in] an accumulation of ad hoc regulatory decisions that bore little resemblance to serious planning.”).

80. *Village of Euclid v. Ambler Realty Co.*, 272 U.S. 365, 388 (1926). The Supreme Court also noted that it could not “exclude the possibility of cases where the general public interest would so far outweigh the interest of the municipality that the municipality would not be allowed to stand in the way.” *Id.* at 390.

81. See *infra* note 120 and accompanying text.

82. See *infra* note 84 and accompanying text.

83. See *infra* notes 88-98 and accompanying text.

84. A public utility essential service has been defined as the erection, construction, alteration, or maintenance, by a public utility or a municipal or other governmental agency, of underground



Exempting essential services from zoning regulation is necessary for several reasons. First, utility distribution facilities must extend into residential and nonresidential areas alike in order to provide electric service. The extension of utility distribution facilities to provide electric service means that at least some electric utility facilities, for example, poles, conduits and small transformers, must be authorized in all zoning districts. Second, electric distribution facilities are so numerous that the administrative burden of reviewing the

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or overhead electrical . . . lines, including poles, cross arms, guy wires, towers . . . switches, transformers, regulators . . . conduits, ladders, cables . . . and other similar accessories and equipment used in connection with and constituting integral parts of the lines and reasonably necessary for the public utility or governmental agency to furnish adequate service or for the protection of public health, safety, or general welfare.

ANNE ARUNDEL COUNTY, MD., COUNTY CODE art. 28, § 1-113(e)(1) (1985 & Supp. No. 23). An essential service does not include "a structure, yard, or station that is used for storage, repair, or processing of equipment or material." *Id.* § 1-113(e)(2). For other examples of local zoning definitions of essential utility services, or similar terms, see ANNAPOLIS, MD., CITY CODE § 21.04.240 (1986) ("essential utility equipment"); AUSTIN, TEX., CITY CODE ch. 13-2A, §§ 1867, 1871 (1986) ("local utility services" and "major utility facilities"); Plano, Tex., Ordinance No. 86-3-14, § 1-600 (Mar. 13, 1986) ("transportation and utility structures/facilities" and "utility distribution/transmission lines"); Queen Anne's County, Md., Zoning Ordinance, § 2300 (Apr. 9, 1987) ("essential services").

Defining these services allows zoning ordinances to deal with such facilities by listing them as permitted uses in all zoning districts. *E.g.*, Austin, Tex., City Code ch. 13-2A, § 2950 (1986) (table 2900) ("local utility services" designated as a permitted or conditional use in various zoning districts); Plano, Tex., Ordinance No. 86-3-14, § 2-502 (Mar. 13, 1986) (Schedule I) ("transportation and utility structures/facilities" and "utility distribution/transmission lines" are permitted uses in all zoning districts). These facilities may also be included in a simple exemption statement. *E.g.*, ANNE ARUNDEL COUNTY, MD., COUNTY CODE art. 28, § 10-113 (1985 & Supp. No. 10) ("This article does not apply to public utility essential services . . ."). For similar provisions, see ANNAPOLIS, MD., CITY CODE § 21.06.170 (1986) (exempted facilities include "poles, wires, cables, conduits, vaults . . . or any other similar distributing equipment"); FAIRFAX COUNTY, VA., COUNTY CODE ch. 112, § 2-104 (1976 & Supp. No. 16) (exempted uses include "[w]ires, cables, conduits, vaults . . . or other similar equipment for the distribution to consumers of . . . electricity . . . operated or maintained by a government entity or a public utility . . . when such facilities are located in a street right-of-way or in an easement less than twenty-five (25) feet in width"); *see also* COMAR § 27.01.02.02(F)(1)(b) (1992) (utility transmission facilities prohibited from the 1,000-foot wide critical area—a strip of land along the shoreline of Maryland's tidal waterways deemed to be environmentally sensitive—"except those [facilities] necessary to serve permitted uses, or where regional or interstate facilities must cross tidal waters"). Such treatment of essential services enables municipalities to focus on regulation of the larger facilities that form the more noticeable infrastructure of an electric utility.

location, installation and replacement of every pole, conduit and small transformer would be overwhelming. Third, even if review of distribution facilities was theoretically possible, meaningful standards are elusive beyond the technical considerations already followed by utilities in developing a distribution system. Finally, even if a locality desired to review and attempted to improve upon such technical considerations, the cost of hiring staff with the necessary expertise would be difficult to justify.

Nonetheless, although municipalities exempt certain "essential" facilities from zoning regulation, local governing bodies may employ other land use laws to impose limitations or standards, such as requiring distribution lines in new developments to be placed underground.<sup>85</sup> In addition, local governing bodies may adopt laws that include provisions requiring utility lines within designated historic districts to be buried.<sup>86</sup> Municipalities justify the undergrounding of utility lines on both safety and aesthetic grounds.<sup>87</sup>

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85. See, e.g., ANNE ARUNDEL COUNTY, MD., COUNTY CODE art. 26, § 3-303(a) (1985 & Supp. No. 6) (requiring in subdivision regulations that new "extensions of distribution lines necessary to furnish permanent electric and telephone service to any residential, commercial, or industrial subdivision shall be made underground"); see also 6 PATRICK J. ROHAN, ZONING AND LAND USE CONTROLS § 40.03[4][c] (1992).

86. See, e.g., MD. ANN. CODE art. 66B, § 8.14.1 (1988); cf. Public Serv. Comm'n v. City of Annapolis, 71 Md. App. 593, 606-08, 526 A.2d 975, 982-83 (1987) (discussing authority of the Public Service Commission to assess costs of burying utility lines in historic districts).

87. ROHAN, *supra* note 85, § 40.03[4][c]. Rohan notes that in addition to aesthetic concerns, "above-ground lines increase the hazard of injuries and electrocution from falling wires and hinder free passage on streets and sidewalks." *Id.* Despite these concerns, courts generally have been unsympathetic to attempts by local governments to require the undergrounding of transmission lines and related major facilities, either because of the substantial cost involved, or because such local regulation interferes with state regulation of the utility. *Id.*; see, e.g., Union Elec. Co. v. City of Crestwood, 499 S.W.2d 480, 483 (Mo. 1973) (if each municipality could "impose its own requirements [regarding the] installation of transmission facilities, a hodgepodge of [construction] methods . . . could result, . . . costs and resulting capital requirements could mushroom," and state control over utility facilities and their method of operation, service, indebtedness, investment and rates would be nullified); cf. *infra* notes 166-70 and accompanying text (discussing curtailment of local zoning power as applied to electric transmission lines). But see Arizona Pub. Serv. Co. v. Town of Paradise Valley, 610 P.2d 449, 451-53 (Ariz. 1980) (undergrounding of transmission lines upheld based on provision in state zoning enabling act allowing the regulation of structure height).

Almost 30 years ago, the Maryland Public Service Commission adopted a policy addressing local zoning laws requiring the undergrounding of power lines. This policy spreads the extra costs of installing underground electric lines to all of the utility's customers in the locality to which the zoning provision applies. *In Re* Petition of Baltimore Gas & Elec. Co., Order No. 56351 (Md. Pub. Serv. Comm'n June 29, 1966).

### B. Special Exception Uses

Special exception uses refer to land uses individually listed in zoning ordinances as permitted in one or more zoning districts, subject to compliance with various standards.<sup>88</sup> Standards may be general in nature, applying to all special exception uses, or they may be specific, applying only to a particular special exception use.<sup>89</sup> Compliance with applicable standards is determined after a public hearing before a zoning board, although some zoning ordinances reserve the right to approve or deny special exception uses to the local governing body.<sup>90</sup> Most zoning ordinances allow the approval authority to impose conditions on the grant of a special exception.<sup>91</sup>

In general, municipalities employ the special exception to control land uses that local residents may regard as "especially troublesome."<sup>92</sup> Often, the reason for requiring special exception approval is to allow the local zoning board or commission to place conditions on a particular use in order to tailor the use to its location and

88. DANIEL R. MANDELKER, *LAND USE LAW* § 6.49 (2d ed. 1988). The zoning special exception use is also known as a "conditional use," requiring a conditional use permit, or a "special use," requiring a special use permit. *Id.*

89. *Id.* Typical general standards for special exception uses include provisions such as the following:

A special exception use may be granted only if, in the opinion of the hearing authority:

(1) the use will not be detrimental to the public health, safety, and welfare;

(2) the location, nature, and height of each building, wall, and fence, the nature and extent of landscaping on the site, and the location, size, nature, and intensity of each phase of the use and its access streets will be compatible with the appropriate and orderly development of the district in which it is located;

(3) operations related to the use will be no more objectionable with regard to noise, fumes, vibration, or light to nearby properties than operations in permitted uses;

(4) the proposed use will not conflict with an existing or programmed public facility, public service, school, or road;

(5) if electric, sewer, storm drainage, or water service is available, the service will be adequate to service the proposed use and will have suitable access;

(6) the proposal will not overburden existing facilities as proposed in the master plan of water and wastewater for development of the surrounding area

(9) the applicant has presented sufficient evidence of public need for the use . . . .

ANNE ARUNDEL COUNTY, MD., COUNTY CODE art. 28, § 12-104 (1985 & Supp. No. 21).

90. MANDELKER, *supra* note 88, § 6.51.

91. ROBERT M. ANDERSON, *AMERICAN LAW OF ZONING* 3d § 21.01 (1986).

92. *Id.*

soften its impact on the neighborhood.<sup>93</sup> The special exception is also commonly used to address the dilemma of providing suitable locations for uses that supply community benefits or essential services, but which are potentially incompatible with other uses when located in close proximity.<sup>94</sup>

The electric substation is the public utility use most frequently classified as a special exception.<sup>95</sup> Substations must be located throughout a community, including in residential areas, in order to provide adequate and reliable electric service.<sup>96</sup> "This is an[] instance where the notion of simon-pure residential zoning has to give way to reality."<sup>97</sup> Standards that substations must meet to qualify for a special exception usually attempt to mitigate the various aesthetic, safety and health concerns that have been used to justify classifying substations as special exception uses rather than permitted uses.<sup>98</sup>

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93. *Id.*

94. *Id.* § 21.06.

95. *See id.* § 21.06 ("[Sub]stations cannot always be located in industrial or commercial districts."); 3A NORMAN WILLIAMS, JR. & JOHN M. TAYLOR, AMERICAN PLANNING LAW § 81.03 (1985) ("[I]mportant zoning problems come up in connection with electric substations.").

96. 3A WILLIAMS & TAYLOR, *supra* note 95, § 81.03. Williams and Taylor comment that "the location of such facilities in residential districts is a matter of necessity, if the services are to be available at all, or at least, if they are to be available relatively economically." *Id.* Despite the need to locate substations throughout a community, substations are not nearly as widespread as poles, conduits, small transformers, and similar facilities that constitute essential services. This operational distinction provides a basis for the regulatory distinction made by most zoning ordinances. *See supra* notes 16-20 and accompanying text (describing role of substations in the electrical distribution system).

97. 3A WILLIAMS & TAYLOR, *supra* note 95, § 81.03.

98. *Id.* Typical standards that a substation must meet include performance regulations governing noise, vibration, architectural scale, site design, and landscaping treatment. *See, e.g.,* ANNE ARUNDEL COUNTY, MD., COUNTY CODE art. 28, § 12-236 (1982 & Supp. No. 13) (use must "blend[] harmoniously" with other development in the area, and may have to be fully or partially enclosed, so as to be "compatible" with nearby development; if located in residential area, use must be "in scale and have the exterior appearance of a residential building with appropriate landscaping"). In addition, the substation must be "necessary for public convenience at the designated location and service cannot be supplied with equal public convenience if located elsewhere." *Id.* § 12-236(d)(1). The designated location for the substation also must not "endanger the health or safety of workers or residents in the community, impair or prove detrimental to neighboring properties or the development of neighboring properties, or create a nuisance to surrounding residential properties." *Id.* § 12-236(d)(4). Finally, the approval authority is typically authorized to prescribe appropriate conditions and safeguards to minimize any adverse effects associated with the substation, including conditions addressing sound-proofing, the construction of fences, barriers, or other safety devices, the surfacing of access roads and driveways, the shielding of floodlights or other artificial illumination, and the provision of landscaping or screening. *See id.* § 12-236(g)(1)-(5).

*C. Power Plants, Transmission Lines and Other Utility Uses*

Not all of the land uses needed to support an electric utility are operationally subject to the same locational constraints as are substations. Uses such as offices and dispatching centers may be restricted to appropriate commercial or industrial zoning districts, along with compatible non-utility uses, without undue effect on the ability of an electric utility to fulfill its mission. Generally, such uses are subject to the same zoning restrictions as their non-utility counterparts.<sup>99</sup>

In addition, some electric utility uses are considered so potentially noxious to residential uses that they are not permitted as special exception uses in residential zoning districts, despite the ability to impose ameliorating conditions.<sup>100</sup> Such uses typically include garages, shops, storage yards and power plants.<sup>101</sup> Some of these potentially noxious uses may even be prohibited in nonresidential zoning districts.<sup>102</sup>

Power plants pose a particular problem. Because one large power plant may serve a considerable area and population, not every municipality must play host to a power plant, especially in urban areas where many municipalities may exist within the same service region. The temptation for those municipalities with affluent and politically sophisticated constituencies is to prohibit power plants within their respective political boundaries so that some other municipality will bear the adverse impacts of the power plant.<sup>103</sup>

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99. See 2 ANDERSON, *supra* note 91, § 12.33 (public utility uses "are amenable to . . . zoning regulations provided that such regulations do not prevent the furnishing of reasonable and adequate service").
100. See, e.g., ANNE ARUNDEL COUNTY, MD., COUNTY CODE art. 28, § 4404(a) (1982 & Supp. No. 13) (electric generating plant classified as permitted use only in heavy industrial zoning district); CITY OF AUSTIN, TX., CITY CODE ch. 13-2A, § 2950 (1986) (table 2900) (allowing "major utility facilities" only in the "P" public zoning district, and then only as conditional use).
101. See, e.g., ANNE ARUNDEL COUNTY, MD., COUNTY CODE art. 28, § 12-236(b) (1985) (utility "special exception[s] in a residential, commercial, open space, or Deferred Development District may not include any of the following: (1) power generating plants; (2) incinerators . . . (4) garages; (5) yards; (6) shops; (7) construction or building materials yards; or (8) service truck dispatching or storage"). *But cf.* Walker v. Town of Elkin, 118 S.E.2d 1, 2-3 (N.C. 1961) (upholding amendment to zoning ordinance allowing a public utility storage and service yard in a "neighborhood business" zoning district).
102. See, e.g., *supra* note 101.
103. One commentator has coined the term "LULU"—locally unwanted land uses—for uses such as power plants. See Frank J. Popper, *The Environmentalist and the LULU*, ENV'T, Mar. 1985, at 7. LULUs and power plants share the characteristic of having "large negative externalities," including a significant level of one or more of the following: noise, safety hazards, health hazards, environmental degradation, and lack of aesthetic appeal. *Id.* at 8. The temp-

Similar to substations but on a comparatively smaller scale, power plants must be located to meet industry operational requirements.<sup>104</sup> In addition, power plants are subject to a variety of specific state and federal approvals.<sup>105</sup> Power plants also exhibit most of the characteristics of locally unwanted land uses, or LULUs.<sup>106</sup> Accordingly, zoning regulation of power plants has been sharply curtailed, or even totally preempted, in a number of states.<sup>107</sup>

Similarly, use of local zoning authority has become more problematic as a means of prohibiting or restricting the extension of electric transmission lines through a reluctant municipality.<sup>108</sup> Because transmission lines have regional significance, courts disfavor attempts by municipalities to use zoning ordinances to "impose special conditions upon utilities seeking to construct transmission lines [that] could effectively thwart the line's construction."<sup>109</sup> Courts that have considered the application of zoning laws to transmission lines have viewed zoning ordinances, excluding or restricting lines to an unreasonably limited area of a municipality, as "detrimental to the welfare of the community," and therefore "not within the police power."<sup>110</sup>

#### D. Government-Owned Electric Utilities

Nearly two thousand electric utilities in the United States are local, publicly owned systems.<sup>111</sup> Nearly another one thousand utilities are rural electric cooperatives.<sup>112</sup> With regard to local zoning laws, the status of these utilities largely depends upon the local zoning

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tation for municipalities to oppose the nearby location of a LULU is "almost instinctive." *Id.* Thus, "[t]he LULU has become the central, shared, sometimes hidden subject of a great deal of city planning, law, economics, and political science, as well as of practical politics, government, and corporate administration." *Id.* at 7.

104. See *supra* notes 7-20 and accompanying text (discussing physical attributes of the electric power system); see *supra* notes 21-27 and accompanying text (discussing operational characteristics of the electric power system).

105. See *supra* notes 50-64 and accompanying text (discussing federal regulation of electric utilities); *supra* notes 65-78 and accompanying text (discussing state regulation of electric utilities).

106. See *supra* note 103.

107. See *supra* note 74 and accompanying text; see also *infra* note 181 and accompanying text.

108. See *infra* notes 159-71 and accompanying text.

109. *Howard County v. Potomac Elec. Power Co.*, 319 Md. 511, 527, 573 A.2d 821, 829 (1990) (holding that state law preempts local zoning regulation of transmission lines designed to carry 69 kV or greater).

110. 2 ANDERSON, *supra* note 91, § 12.33 (zoning ordinance that "prevent[s] the furnishing of essential services to the residents of the community, is not reasonably related to the public health, safety or welfare").

111. See *supra* note 4.

112. See *supra* note 4.

laws themselves, or upon the state enabling authority for local zoning laws.<sup>113</sup> If either the enabling statute or the local zoning ordinance exempts public uses from the scope of zoning regulations, any government-owned utility, including an electric utility, would also be exempt.<sup>114</sup>

In the absence of an express exemption from the scope of zoning regulation, courts have often found an implied exemption, usually on the basis that operating a utility is a governmental function immune from municipal regulation.<sup>115</sup> A minority of courts considering the issue of exemption in the absence of an express statutory provision have determined that publicly owned utilities must comply with local zoning laws.<sup>116</sup> In most cases, however, an appropriate legislative enactment could reverse this determination.<sup>117</sup>

## V. LIMITATIONS ON LOCAL REGULATION OF ELECTRIC UTILITIES

The electric power industry requires an expansive array of physical improvements, or infrastructure, in order to generate, transmit and deliver electric energy.<sup>118</sup> Through the exercise of local zoning authority over land uses, municipalities may seek to control the

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113. 2 ANDERSON, *supra* note 91, § 12.36.

114. *Id.*

115. *Id.*; *cf.* *Glascoek v. Baltimore County*, 321 Md. 118, 581 A.2d 822 (1990) (county governments are exempt from their own zoning laws in absence of specific intention in the law to make county subject to same). *But cf.* *Baltis v. Village of Westchester*, 121 N.E.2d 495, 503-05 (Ill. 1954) (municipal waterworks is a proprietary function, and thus is subject to local zoning regulations).

116. 2 ANDERSON, *supra* note 91, § 12.36; *see Hunke v. Foote*, 373 P.2d 322, 323-24 (Idaho 1962) (city acted in proprietary capacity in constructing electric substation, and was thus subject to its own zoning laws).

117. *See* 2 ANDERSON, *supra* note 91, § 12.36 (utilities "owned by the government are amenable to or immune to local zoning ordinances depending upon applicable local statutes").

118. *See supra* notes 7-20 and accompanying text; *see also* 3A WILLIAMS & TAYLOR, *supra* note 95, § 81.03. For electric utilities, Williams and Taylor note that the following facilities are essential:

1. Electric generating plants, normally located in industrial or in open rural areas.
2. Electric high-tension distribution lines, extending across the country through all kinds of areas and districts.
3. Electric substations, to step down the current from higher voltage to distributable voltage which may be used by standard appliances in the shop or home.
4. Electric distribution wires, to individual consumers, which may be above ground (usually strung on poles) or underground.

*Id.*

location of the industry's infrastructure. In addition, municipalities may seek to regulate site design and certain other physical characteristics of industry infrastructure, in an attempt to eliminate or mitigate the possible adverse impacts to adjacent properties and neighborhoods.

#### A. *Conflicts Inherent in Local Regulation*

Much local zoning regulation of the electric power infrastructure inherently creates the potential for conflicts with requirements imposed upon the industry by federal and state regulation, and by the laws of physics. For example, conflicts may arise from (1) requirements that a utility provide nonpreferential service to *all* customers in its exclusive service area; (2) requirements that such service be safe, efficient and reliable; (3) the fact that wires are the only distribution method available to a utility; and (4) the unique logistical problems involved in delivery of electric energy, including the fact that service must respond to moment-by-moment demand.<sup>119</sup>

In the past, these inherent conflicts have been minimized by the relaxed nature of local regulation of electric utility facilities under local zoning ordinances.<sup>120</sup> The situation, however, is changing.<sup>121</sup> Spurred by citizen demands to protect property values, improve aesthetics, and reduce impacts disturbing to residential neighborhoods, increasing numbers of local governments are apparently abandoning the *laissez-faire* treatment of electric utility facilities that was common in the past.

In place of relaxed requirements, local governments are adopting new zoning regulations that limit the location of electric utility facilities and impose stricter performance standards upon those facilities. In addition, zoning approvals such as special exceptions or conditional use permits that once were routinely granted are now closely scrutinized, and, when granted, are often subject to a variety of conditions and restrictions.

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119. See 2 ANDERSON, *supra* note 91, § 12.32 (special characteristics of public utilities require corresponding special treatment by zoning regulations).

120. See 6 ROHAN, *supra* note 85, § 40.03[4][a] (local zoning controls over public utilities have frequently been "relaxed or non-existent"); *cf.* 3A WILLIAMS & TAYLOR, *supra* note 95, § 81.05 (noting the small body of case law reflecting conflicts between zoning regulations and the special characteristics of electric utilities).

121. See 2 ANDERSON, *supra* note 91, § 12.32 ("[G]rowth and shift of population has generated great demand for the services furnished by . . . electric . . . utility companies. Residents of the newly developed areas desire the services, but they are understandably reluctant to permit the expansion or installation of the facilities which are essential to providing it.'").



If the 1970s and 1980s saw an appreciable boom in the application of zoning laws to the electric power industry, a veritable explosion is looming in the 1990s. For the last several years, scientific and public attention has steadily been drawn to the issue of whether exposure to the electromagnetic fields produced by sixty Hertz electric energy causes cancer and other adverse health effects in humans.<sup>122</sup> Although overall scientific evidence on the issue is presently inconclusive,<sup>123</sup> some epidemiological evidence supports the proposition that electromagnetic field exposure plays a role in causing or promoting certain illnesses.<sup>124</sup>

The delay in a scientific resolution of the relationship between exposure to electromagnetic fields and human health may bode worse for the electric utility industry than will the ultimate answer. If a causal relationship between electromagnetic field exposure and human

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122. See, e.g., R.I. GEN. LAWS § 39-25-2 (Supp. 1993). The Act sets forth the following legislative declarations:

(a) The citizens of the state whose homes are in close proximity to proposed high voltage lines have expressed concern about the possible harmful effect of electromagnetic fields that emanate from the electrical utilities facilities;

(b) There have been a number of scientific studies that purport to suggest that the electromagnetic fields associated with electrical utility facilities may present a significant health risk;

(c) The issue of the adverse health effects of human exposure to electromagnetic radiation has been the subject of newspaper and scientific journal articles, and although to date no firm data exists indicating at what levels this radiation may pose certain health risks, scientific studies and preliminary evidence warrant an approach of prudent avoidance;

(d) While the general assembly recognizes that at present, research data neither provides a basis for asserting that magnetic fields pose a significant health risk nor does it allow one to categorically assert that there are no risks. Prudence, therefore, suggests caution in dealing with electromagnetic fields and public health issues until further research permits a more conclusive determination.

*Id.*

123. See Harold R. Piety, *What We Don't Know About EMF*, PUB. UTIL. FORT., Nov. 15, 1991, at 14, 18 (scientific research is not expected to begin to produce answers for another five to ten years—if then). According to the author, it is conceivable that “[d]efinitive answers . . . may never be forthcoming [because] it is logically impossible to prove a negative.” *Id.* at 14.

124. See, e.g., Rita Beamish, *EPA Urges Study of Health Risks Posed by Electromagnetic Fields*, BOST. GLOBE, Feb. 27, 1993, at 1 (reporting on call by EPA for “vast research on potential dangers” associated with electromagnetic fields, because “too little is known to gauge risks”); Michael Weisskopf, *EPA Study Fails to Link Electricity to Cancer; Scientists Note Inadequacies in Research*, WASH. POST, June 22, 1990, at A24 (according to a preliminary EPA report, “[l]ow levels of electr[omagnetic energy] generated by power lines or home appliances may cause cancer, but the evidence is too circumstantial to draw firm conclusions”).

disease is scientifically established, both the industry and its customers could make informed decisions about the method and extent of reducing human exposure given the vital need for electric energy and the costs involved in diminishing or shielding electromagnetic fields. In the meantime, the electric power industry faces the prospect of responding to public concern in the absence of concrete scientific findings on which to base its response.<sup>125</sup>

Both the importance and the emotional nature of the electromagnetic field debate, coupled with the unsatisfactory state of the data, presages repeated battles before local governing bodies, planning commissions, boards of appeals and other zoning decision makers whenever an electric utility facility of any consequence is proposed.<sup>126</sup> Moreover, the lack of scientific certainty virtually assures divergent results among local jurisdictions, which in turn may result in the kind of patchwork of local laws and inconsistent administrative treatment that is an anathema to the industry's broader logistical and regulatory burdens.<sup>127</sup> As one court concluded long before the debate over electromagnetic fields began:

It is rather difficult to conceive of a subject which more requires uniform regulation at a high and broad level of

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125. Piety, *supra* note 123, at 18 (electric power industry is "in the decidedly uncomfortable position of saying, 'We don't know'").

126. See, e.g., R.I. GEN. LAWS §§ 39-25-1 to 39-25-3 (Supp. 1993) (Electric Transmission Siting and Regulatory Act); H.J. Res. 25, Md. H. Del., 1993 Sess. (1993) (resolution concerning health risks of electromagnetic fields requesting study by the state's Toxics, Environmental Science and Health Administration, including recommendations as to "precautionary measures" and measurements of electromagnetic fields around "energy substations"); Res. No. R-25-91, City Council, Annapolis, Md., July 8, 1991 (denying conditional use permit for expansion of electric substation in part because utility failed to prove that exposure to electromagnetic fields associated with the substation "will not be detrimental to or endanger the public health, safety, or general welfare"); *In Re* Baltimore Gas & Elec. Co., No. BA-74-91S, slip op. at 7-8 (Anne Arundel County, Md. Bd. of App. Jan. 28, 1992) (summarizing testimony of neighboring residents opposing electric substation based on concerns about noise, lack of buffers and fears of exposure to electromagnetic fields); LOUIS SLESIN ET AL., ELECTROMAGNETIC FIELDS AND LAND-USE CONTROLS 10-11, 16 (1991) (American Planning Association Planning Advisory Report No. 435) (discussing local efforts to regulate exposure to electromagnetic fields generated by power lines in Whatcom County, Washington; Brentwood, Tennessee; Wilmette, Illinois; and Ashland, Oregon).

127. See *Town of East Greenwich v. O'Neil*, 617 A.2d 104, 114 (R.I. 1992) (holding "null and void" town ordinance creating three-year moratorium on construction of high-voltage transmission lines). The Rhode Island Supreme Court held an East Greenwich ordinance null and void, noting that since its adoption, three nearby municipalities enacted similar laws. *Id.* at 111. The court expressed "concern[] that patchwork electrical-transmission legislation will handicap compliance with safety regulations and inhibit the efficient distribution of electrical power." *Id.* at 111-12.

authority than the method of transmission of electric power, especially where it must be generated in a single location and distributed and used in many and distant places. Were each municipality . . . free to impose its own ideas . . . nothing but chaos would result, and neither the utility nor the state agency vested with control could be assured of ability to fulfill its obligations of furnishing safe, adequate, and proper service to the public . . . .<sup>128</sup>

### B. *Judicial Responses to Local Zoning Regulation*

Because of the relaxed approach taken by most local governments in the past toward zoning regulation of electric utilities, the body of case law reflecting conflicts between zoning regulations and the special characteristics of electric utilities is comparatively small.<sup>129</sup> As municipalities have moved to apply zoning laws more vigorously, however, judicial involvement in disputes between electric utilities and local governments has grown. The trend toward greater judicial involvement is especially noticeable in disputes involving substations and transmission lines.

More vigorous application of zoning laws to electric utility land uses has occurred for several reasons. First, since the late 1950s and early 1960s, an increasing number of municipalities have adopted zoning laws, and the sophistication of those laws has grown.<sup>130</sup> Second, public awareness of and participation in the zoning process has intensified.<sup>131</sup> Third, as scientists have begun to study the possible health effects associated with impacts such as noise and electromagnetic fields, public concern about these specific impacts has been aroused. This public concern has been expressed before local legis-

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128. *In re Public Serv. Elec. & Gas Co.*, 173 A.2d 233, 240-41 (N.J. 1961).

129. *See supra* note 120.

130. *See* MANDELKER, *supra* note 88, § 1.01 ("All states have legislation authorizing municipal zoning, and all major cities except Houston have zoning ordinances. Practically all states authorize zoning by counties. In some states, local governments may adopt and administer zoning and other land use controls under . . . home rule powers."); *id.* §§ 1.03-1.08 (summarizing the metamorphosis of local land use laws from simple zoning for land use and density to complex regulations addressing such areas as subdivision control, historic district zoning, landmark preservation, resource protection, aesthetic regulation, growth management, and planned developments); *id.* § 1.16 (discussing the stages through which land use law has developed over the years). The city of Houston, the last major zoning hold-out, is preparing to adopt a comprehensive zoning ordinance. *See* David Dillon, *The Scoop on Houston*, PLAN., Apr. 1991, at 13.

131. *Compare* RICHARD F. BABCOCK, *THE ZONING GAME* (1966) with RICHARD F. BABCOCK & CHARLES L. SIEMON, *THE ZONING GAME REVISITED* (1985).

lative bodies and at zoning hearings whenever electric power facilities are at issue.<sup>132</sup>

In addition, some courts may have contributed to the increase in judicial involvement in disputes involving electric utilities and zoning laws by encouraging local governments to abandon the traditional relaxed regulation of utilities.<sup>133</sup> These courts expressed concern about the lack of specific regulations for utility land uses and the unsuitability of the judiciary to resolve disputes on an ad hoc basis in the absence of regulation.<sup>134</sup> The New York Supreme Court of the Judicature admonished as follows:

Procedures should be provided in a zoning ordinance for a Zoning Board of Appeals or some other local administrative agency to determine the location of a public utility structure since [a Board or agency] is better suited [than a court] to evaluate the effect in the neighborhood and its compliance with the intent and spirit of the zoning plan.<sup>135</sup>

#### 1. Public Utilities as Favored Uses

Regardless of the judiciary's role in increasing zoning regulation of public utilities, several zoning treatise writers conclude that public utility land uses should be afforded a judicially "favored" status when courts review local zoning actions.<sup>136</sup> The reasons supporting

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132. See, e.g., Ted Shelsby, *NCT, Utilities Joining Forces to Reduce Noise*, THE SUN (BALT.), Oct. 26, 1993, at 11C, 20C (reporting on the formation of a consortium of electric utilities to refine and produce noise mitigation equipment that can reduce electric transformer noise by 75%, and noting that utilities are "being pressured by new government regulations to lower the sound of all new transformers in residential neighborhoods"); Timothy B. Wheeler, *BG&E Project in Annapolis Leaves Some Wary*, EVENING SUN (BALT.), May 23, 1991, at C7 (reporting on opposition to expansion of an electric substation based on neighborhood fears that electromagnetic fields may cause cancer).

133. See *Niagara Mohawk Power Corp. v. City of Fulton*, 188 N.Y.S.2d 717 (N.Y. App. Div. 1959); *New York State Elec. & Gas Corp. v. McCabe*, 224 N.Y.S.2d 527 (N.Y. Sup. Ct. 1961). Of course, the courts did not intend to involve the judiciary more deeply in utility versus zoning issues. Cf. *Niagara Mohawk*, 188 N.Y.S.2d at 723 ("The questions involved in the selection of a site [for a utility facility] ought to be determined by a legislative or administrative body rather than by the courts.").

134. See, e.g., *Niagara Mohawk*, 188 N.Y.S.2d at 724.

135. *McCabe*, 224 N.Y.S.2d at 533.

136. See 2 ANDERSON, *supra* note 91, § 12.32 ("The authority of a municipal corporation to regulate the location, expansion, and operation of public utilities is not identical to its power over the generality of residential, commercial, and industrial uses."); 6 ROHAN, *supra* note 85, § 40.03[4][a] ("local government regulation of privately owned utilities is substantially more restricted than its regulation of other commercial enterprises . . ."); 4 EDWARD H. ZIEGLER,

the favored status of utility land uses include the following arguments: (1) utility uses are "necessary for the public, health, safety, or welfare";<sup>137</sup> and (2) by necessity, such uses "must often be located in areas which would otherwise not be the most suitable from the standpoint of customary zoning criteria."<sup>138</sup> The favored status of public utility land uses can also be justified based upon the existence of state regulation of utilities and the unique operational requirements associated with public utilities.<sup>139</sup>

In spite of the apparent harmony of expert opinion that public utility uses should enjoy a favored status, and notwithstanding the soundness of the reasoning developed to support this opinion, the case law is not as unanimous.<sup>140</sup> The body of case law reflects that

JR., ET AL., RATHKOPF'S THE LAW OF ZONING AND PLANNING § 55.01 (4th ed. 1984) ("Public utilities . . . enjoy a position in relation to zoning which is more favored than that of other types of commercial enterprises."); *id.* § 55.01[2] ("In cases where local zoning power over public utilities has been acknowledged, that power has been curtailed."); *see also* 83 AM. JUR. 2D *Zoning & Planning* § 316 (1992) ("Public utilities are amenable to the zoning regulations provided that such regulations do not prevent the furnishing of reasonable and adequate service."); *cf. id.* § 317 ("In general, an administrative board has a narrower range of discretion in dealing with special-permit applications filed by public utilities than is true in the case of the generality of permit applications.").

137. 4 ZIEGLER, *supra* note 136, § 55.01. Conflicts may arise with regard to uses which are necessary for the public welfare. Oftentimes,

zoning cases involving public utilities present a conflict with regard to the public welfare, between the more parochial public welfare furthered by a local zoning ordinance and the greater public welfare served by a public utility. For the most part, courts have had little difficulty in resolving this conflict in favor of the greater public welfare.

*Id.* (footnote omitted); *accord* 6 ROHAN, *supra* note 85, § 40.03[4][a] ("The public has a significant interest in the safe delivery of economical and efficient utility services, and it is generally recognized that this need takes priority over purely local land use matters.").

138. 4 ZIEGLER, *supra* note 136, § 55.01.

139. 2 ANDERSON, *supra* note 91, § 12.32. Anderson explains that [d]ue to the singular public interest in the efficiency of the services furnished by public utilities, and the statewide concern that these services be furnished at reasonable cost to consumers, these uses are subject to state regulation as well as some local control. This dual control raises possibilities of conflict, and the matter is further complicated by public ownership of some utilities. In addition, the general rules developed in cases involving the common business uses have been modified to fit the unique features of public utility uses, and to permit the expansion of essential services consistent with comprehensive plans for community development.

*Id.*

140. In fact, the favored status doctrine may have had an accidental birth. In a comparatively early zoning case, the Supreme Court of Kansas construed zoning

utilities have generally been successful in avoiding attempts by local governments to use zoning laws to thwart extensions of transmission lines. But in dealing with the location of electric substations, utility challenges to local zoning decisions have not been as well received.

## 2. Substations

Frequently, an electric utility must obtain local zoning approval in order to construct a substation, especially one proposed in a

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regulations allowing public utilities by special permit to mean that because of the public interest inherent in such uses, zoning regulations did not apply with "all force and rigor" to utility uses. *Koch v. Board of County Comm'rs*, 342 P.2d 163, 168-70 (Kan. 1959). This statement by the court was likely based on a misunderstanding of the special permit or special exception as a regulatory tool. The court seemingly mistook the local ordinance's classification of utility uses as permissible by special permit as evidence that utility uses were favored. A later decision by the Kansas supreme court noted that the law construed by the *Koch* court was subsequently changed, and that the *Koch* holding thus was superseded. *Stice v. Gribben-Allen Motors, Inc.*, 534 P.2d 1267, 1275-76 (Kan. 1975).

Nevertheless, treatise writer Anderson cited *Koch* to support the following analysis:

In general, an administrative board has a narrower range of discretion in dealing with special-permit applications filed by public utilities than is true in the case of the generality of permit applications. Because the utility furnishes an essential service, denial of permit may have serious consequences, and accordingly may be more closely scrutinized by the courts. It is said that the zoning regulations should not be applied to public utilities with "all force and vigor" [sic] and that a special permit should be granted to a public utility where the selected site is reasonably convenient rather than absolutely necessary.

2 ANDERSON, *supra* note 91, § 12.34 (citing *Koch*, 342 P.2d at 170). In turn, various courts cited to this portion of Anderson to support the proposition that utility uses should be favored, and therefore treated differently from the generality of uses regulated by zoning laws. *See, e.g.*, *Long Island Water Corp. v. Michaelis*, 282 N.Y.S.2d 22, 23 (N.Y. App. Div. 1967) (citing ANDERSON, *supra* note 91, § 12.34); *cf.* *County Council for Prince George's County v. Potomac Elec. Power Co.*, 263 Md. 159, 177, 282 A.2d 113, 121-22 (1971) (court quotes 2 ANDERSON, *supra* note 91, but comments that "[w]e do not find it necessary to pass upon this interesting proposition of law inasmuch as we are of the opinion that even applying the applicable zoning laws with 'all force and vigor,'" the special exception should be granted). Later courts cited decisions which utilized Anderson's analysis, and the favored status doctrine thus became solidly established in some states. *See, e.g.*, *Video Microwave, Inc. v. Zoning Bd.*, 354 N.Y.S.2d 817, 822 (N.Y. Sup. Ct. 1974) (citing *Michaelis*, 282 N.Y.S.2d 22, for the proposition that "public utilities which are essential to the public health, safety and welfare enjoy a favored position in relation to zoning regulations"); *cf.* *Schultz v. Pritts*, 291 Md. 1, 19 n.5, 432 A.2d 1319, 1329 n.5 (1981) (in developing judicial test for evaluation of special exception cases, court declined to use as guide a case from New York involving public utility, because "the ordinary standard concerning adverse effect may not apply" to a public utility).

residential area.<sup>141</sup> Despite the favored status doctrine, courts in some states have had little trouble sustaining municipal denials of zoning approvals for electric substations, especially when a zoning variance was needed. For example, in *Alabama Power Co. v. Brewton Board of Zoning Adjustment*,<sup>142</sup> the Alabama Supreme Court justified a denial of zoning approval on the basis that the substation would (1) have adverse effects on property values; (2) be unsightly; (3) emit a noise that could "disturb the peaceful enjoyment of surrounding property"; and (4) be "likely [to] interfere with television reception in the area."<sup>143</sup> The court reached its decision despite undisputed evidence from utility witnesses that the area required an additional substation, and that engineering studies showed that the site selected by the utility was the most desirable one.<sup>144</sup>

Similarly, in *Consolidated Edison Co. v. Gillcrist*,<sup>145</sup> a New York appellate court sustained the denial of a zoning use variance for an electric substation because evidence existed "that the proposed substation would tend to depreciate the value of properties in the neighborhood and tend to prejudice adjoining and neighboring prop-

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141. See *supra* notes 95-98 and accompanying text.

142. 339 So. 2d 1025 (Ala. 1976).

143. *Id.* at 1026.

144. *Id.* Evidence also existed to dispute the utility's claim that the site selected by the utility was the only available site in the area. *Id.* Although the court's opinion is unclear as to the exact provisions in the local zoning ordinance applicable to public utility land uses, apparently the city's zoning ordinance did not contain provisions allowing public utility land uses as special exception uses. Thus, the utility in this case had to apply for a zoning use variance. *Id.*

Standards for approval of a use variance generally involve proving "unnecessary hardship," which essentially requires proof of the inability to use the property involved for any reasonable use whatsoever. MANDELKER, *supra* note 88, § 6.40. Obviously, such a strict standard would make it very difficult for electric utilities to obtain zoning approval for needed utility facilities. *Cf.* *Consolidated Edison Co. v. Hoffman*, 403 N.Y.S.2d 193, 197-200 (N.Y. 1978) (holding that usual standards for the grant of a use variance are inappropriate when a public utility is the applicant). Moreover, some jurisdictions prohibit use variances altogether, and many of the jurisdictions that do not prohibit them will disapprove of a particular use variance request if the proposed use could be accommodated on the property by means of a rezoning. MANDELKER, *supra* note 88, § 6.39. This is one reason why local governments began to use the special exception technique. See *supra* notes 133-135 and accompanying text; *cf.* *Water Works Bd. of Birmingham v. Stephens*, 78 So. 2d 267, 271 (Ala. 1955) (zoning ordinance provision allowing modification of zoning regulations for structures built by public service corporations was not in the nature of a variance, but was an "exception" to the land uses ordinarily permitted); *Zylka v. City of Crystal*, 167 N.W.2d 45, 48-49 (Minn. 1969) (explaining the basis of special exceptions or conditional uses in a zoning ordinance, and distinguishing same from variances).

145. 127 N.Y.S.2d 365 (N.Y. App. Div. 1954).

erties."<sup>146</sup> In another use variance case, *Long Island Lighting Co. v. Incorporated Village of East Rockaway*,<sup>147</sup> the court affirmed the denial of zoning approval for a substation, commenting that the fact that the proposed use was in the public interest "cannot be deemed a substitute for the statutory prerequisite to a variance."<sup>148</sup>

When the zoning approval mechanism employed is a special exception, electric utilities seem to fare somewhat better.<sup>149</sup> For example, the Court of Appeals of Missouri, in *State ex rel. Union Electric Co. v. University City*,<sup>150</sup> reversed the denial of a conditional use permit for a substation, holding that a new substation in the area was "indispensable to continued adequate electrical service to the public."<sup>151</sup> The court declared that it was a "preposterous notion that the [city] council members were . . . able to judge the need for and location of a substation [better] than the representatives from [the electric utility]."<sup>152</sup> According to the court, the only basis for denying the conditional use permit would be if "the site selected was unreasonably selected, or selected in bad faith, or . . . the site selected interferes with a presently existing plan of development and an alternative site is reasonably available."<sup>153</sup>

Two other cases also illustrate a more favorable judicial response in special exception cases. In *County Council v. Potomac Electric Power Co.*,<sup>154</sup> the Court of Appeals of Maryland reversed a zoning board's denial of a special exception for an electric substation.<sup>155</sup> The court of appeals held that the zoning board acted arbitrarily in denying the special exception where "[t]here [was] no credible evi-

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146. *Id.* at 366.

147. 110 N.Y.S.2d 884 (N.Y. App. Div. 1952).

148. *Id.* at 885. The legal effect of both *Gillcrist* and *East Rockaway* has been superseded by the New York court of appeals' 1978 decision in *Consolidated Edison Co. v. Hoffman*, 403 N.Y.S.2d 193, 197-200 (N.Y. 1978) (holding that usual standards for the grant of a use variance are inappropriate when a public utility is the applicant). However, the two earlier cases illustrate the bases on which proposals for electric substations are still challenged today—noise, impact on property values and, aesthetics—regardless of whether the zoning process employed is a use variance or a special exception.

149. *See, e.g., In re Application of Long Island Lighting Co.*, 211 N.Y.S.2d 576, 580 (N.Y. Sup. Ct.), *aff'd*, 222 N.Y.S.2d 589 (N.Y. App. Div. 1961) (board of appeals is limited to standards set forth for special exception, and once such standards are met, right to the special exception arises; thus, board is without authority to consider possibility of more suitable locations for substation).

150. 449 S.W.2d 894 (Mo. Ct. App. 1970).

151. *Id.* at 900.

152. *Id.* at 901.

153. *Id.*

154. 263 Md. 159, 282 A.2d 113 (1971).

155. *Id.* at 175, 282 A.2d at 121.



dence that noise will adversely affect the surrounding properties" and "[t]he great need for [an] additional facility was established."<sup>156</sup>

On the issue of noise, a New York appellate court reversed the zoning board's denial of a special exception for a substation in a business zoning district even though the evidence showed that the equipment would emit a "slight hum."<sup>157</sup> On further appeal, the Court of Appeals of New York narrowly affirmed, noting the zoning ordinance contemplated the substation use in the zoning district via the special exception process.<sup>158</sup>

### 3. Transmission Lines

Although obtaining zoning approval for substations has been an uneven proposition, electric utilities have fared consistently better when facing zoning challenges to transmission lines.<sup>159</sup> Many such challenges, actual and potential, have been averted or nullified by statutory enactments and judicial decisions preempting the power of local governments to use zoning authority to prevent the construction of transmission lines.<sup>160</sup>

Even in the absence of total preemption, courts have curtailed the exercise of local zoning power when local governments attempt to prohibit transmission lines altogether.<sup>161</sup> Some courts have been concerned that authority to prohibit a transmission line may be used by one jurisdiction to "dump the undesirable facilities necessary to furnish [electric] services upon the lap of an adjoining municipal-

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156. *Id.* Evidence of need was based on a 53% increase in customers and a 169% increase in electricity demand over a six year period. *Id.* at 163, 282 A.2d at 115.

157. *Long Island Lighting Co. v. City of Long Beach*, 113 N.Y.S.2d 762, 763 (N.Y. App. Div. 1952), *aff'd*, 114 N.E.2d 429 (N.Y. 1953). The court was unpersuaded that the noise would have adverse effects, given the other types of uses allowed by right in the business zoning district. *Id.*

158. *Long Island Lighting Co. v. City of Long Beach*, 114 N.E.2d 429, 429 (N.Y. 1953). The issue of noise emitted by electrical transformers evidently has frequently been raised in New York court proceedings. *Compare Long Island Lighting Co.*, 114 N.E.2d at 429 (stating "no injurious effect would arise other than a slight hum") with *Miranda v. Buffalo Gen. Elec. Co.*, 251 N.Y.S. 510 (N.Y. App. Div. 1931) (stating that "[t]he rights of [persons] to peace and quiet of their established homes are not trifling, inconsequential, technical, nor insubstantial privileges").

159. *See, e.g., supra* notes 108-10 and accompanying text.

160. *See infra* notes 176-231 and accompanying text; *see generally* Note, *Application of Local Zoning Ordinances to State-Controlled Public Utilities and Licensees: A Study in Preemption*, 1965 WASH. U. L.Q. 195 (1965).

161. *See* 2 ANDERSON, *supra* note 91, § 12.33. Anderson notes that most courts insist local regulation "must not amount to prohibition" because "public utilities [must] be free to expand to meet the growing needs of the community." *See id.*

ity.”<sup>162</sup> Other courts have been sensitive to potential conflicts between local zoning laws and a public utility’s franchise responsibilities,<sup>163</sup> and to the broader public interest vis-à-vis the interest of a single community.<sup>164</sup>

In 1950 a federal district court warned that local governments risk running afoul of the Commerce Clause when they attempt to apply zoning regulations to utility facilities that cross state borders.<sup>165</sup> Given the significant interstate connections among electric utilities that have developed since 1950,<sup>166</sup> and the increasingly active role of federal agencies in electric utility regulation,<sup>167</sup> a Commerce Clause theory for further limiting local zoning regulation of electric transmission lines may well pique the interest of contemporary federal courts.

State courts have also protected transmission lines from zoning changes aimed at stopping specific projects. In *Detroit Edison Co. v. City of Wixom*,<sup>168</sup> the Supreme Court of Michigan held invalid an amendment to the city’s zoning ordinance limiting the height of utility towers to 100 feet.<sup>169</sup> According to the court, the utility acquired a vested right to construct a transmission line using higher towers, based on its prior purchase of a four mile right-of-way and commitments for equipment purchases exceeding \$25 million.<sup>170</sup> Sim-

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162. *Consolidated Edison Co. v. Village of Briarcliff Manor*, 144 N.Y.S.2d 379, 385 (N.Y. Sup. Ct. 1955); *cf.* *Town of East Greenwich v. O’Neil*, 617 A.2d 104, 112 (R.I. 1992) (“It is beyond cavil to state that [a moratorium on transmission lines in one municipality] imposes undesirable penalties upon surrounding municipalities.”).

163. *See, e.g., Briarcliff*, 144 N.Y.S.2d at 384 (utility “has the franchise and right, and furthermore the duty, subject to reasonable regulations, to erect and maintain the proposed transmission line, and no local governmental unit shall nullify or interfere with that right and duty”); *cf.* *Howard County v. Potomac Elec. Power Co.*, 319 Md. 511, 573 A.2d 821 (1990) (finding preemption of local zoning authority in part based on the concern that one local government might be able to thwart the construction of a transmission line by imposing “complications” in the form of conditions on the grant of a special exception).

164. *See* 3A WILLIAMS & TAYLOR, *supra* note 95, § 81.06 (“while [a] prohibition [against transmission lines] might serve the interest of a few neighborhood property owners, it [is] directly contrary to the general welfare and the public interest in making electricity available”).

165. *Transcontinental Gas Pipe Line Corp. v. Borough of Milltown*, 93 F. Supp. 287, 292-95 (D.N.J. 1950); *see also* *New York State Natural Gas Corp. v. Town of Elma*, 182 F. Supp. 1, 6-7 (W.D.N.Y. 1960) (application of town zoning ordinance and building code so as to prevent natural gas company from constructing a regulating station as a part of an interstate gas pipeline was an unconstitutional, undue burden on interstate commerce).

166. *See supra* notes 21-27 and accompanying text.

167. *See supra* notes 43-64 and accompanying text.

168. 172 N.W.2d 382 (Mich. 1969).

169. *Id.* at 390.

170. *Id.* at 389-90.

ilarly, courts have sustained specific zoning amendments favoring transmission lines and other utility facilities against challenges by neighboring property owners.<sup>171</sup>

### C. State Preemption of Local Regulation

Court cases resulting from clashes between the unique characteristics of the electric power industry and the exercise of local zoning authority consistently involve the same themes. These themes include the attributes of power plants as locally unwanted land uses, the multi-jurisdictional reach of transmission lines, the operational constraints on the locations of electric substations, and the NIMBY<sup>172</sup> reactions of affected neighbors and/or municipalities. In some states these themes have been rehashed many times, before the courts, zoning hearing examiners, boards of appeals and local governing bodies.<sup>173</sup> In other states, either the legislature or the judiciary has acted to consolidate land use decision making related to public utility facilities by partially or totally preempting local zoning authority. In states that have opted for preemption, the regulatory authority lost by municipalities is vested in the state's public utility commission.<sup>174</sup>

#### 1. Express Preemption

Statutory provisions that directly address the issue of local zoning preemption vary widely in scope and effect. Some state laws preempt local zoning authority altogether,<sup>175</sup> whereas others expressly allow

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171. See, e.g., *Thompson v. City of Los Angeles*, 185 P.2d 393, 394-95 (Cal. Dist. Ct. App. 1947) (amendment exempting transmission lines from all zoning requirements held dispositive in denying request for injunction against construction of transmission line); *Stiffler v. Traverse City*, 160 N.W.2d 610, 613 (Mich. Ct. App. 1968) (upholding zoning text amendment increasing maximum height of public utility buildings from 75 feet to 100 feet, when purpose of amendment was to allow expansion of existing electric power plant); cf. *State ex rel. Christopher v. Matthews*, 240 S.W.2d 934, 938 (Mo. 1951) (upholding rezoning map amendment for utility steam generating plant because of public interest inherent in utility use; amendment was not impermissible "spot zoning").

172. NIMBY is an acronym for "not in my back yard." LULUs, see *supra* note 103, frequently cause NIMBY reactions.

173. See, e.g., *In re Baltimore Gas & Elec. Co.*, No. BA-74-91S, slip op. at 7-8 (Anne Arundel County, Md. Bd. of App. Jan. 28, 1992) (summarizing neighborhood testimony against proposed electric substation based on concerns about noise, lack of buffers, and fears of exposure to electromagnetic fields).

174. For a brief discussion of the authority of state public utility commissions, see *supra* notes 66-78 and accompanying text.

175. E.g., ALASKA STAT. § 42.05.641 (1989 & Supp. 1992); KY. REV. STAT. ANN. § 100.324(1) (Baldwin Supp. 1992). Alaska's statute accomplishes preemption by extending the jurisdiction and authority of the state's public utility commission

local governments to subject utility land uses to reasonable zoning regulations.<sup>176</sup> Still other state laws limit local zoning authority to the promulgation of area regulations such as setbacks, lot coverage, parking and landscaping standards.<sup>177</sup> Under such limited authority, the municipality cannot prohibit the utility use, but can require that the utility attempt to design the use to be reasonably compatible with other land uses in the vicinity.<sup>178</sup>

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to "public utilities operating within a municipality, whether home rule or otherwise." ALASKA STAT. § 42.05.641 (1989 & Supp. 1992). The statute further provides that "[i]n the event of a conflict between . . . the commission and . . . a local governmental entity, the certificate, order, decision, or regulation of the commission shall prevail." *Id.*

Kentucky's preemption provision is found in the state's zoning enabling law, which provides in part that:

public utilities operating under the jurisdiction of the Public Service Commission . . . or [the] Federal Power Commission, [and] any municipally owned electric system . . . shall not be required to receive the approval of the [local] planning unit for the location or relocation of any of their service facilities.

KY. REV. STAT. ANN. § 100.324(1) (Baldwin Supp. 1992). Kentucky law requires, however, that a public utility provide a local planning commission with information concerning proposed utility facilities upon request. *Id.* § 100.324(3).

176. *E.g.*, GA. CODE ANN. § 46-3-14(a) (1992). The Georgia law, found among statutory provisions specifically regulating electric service companies, provides that "[n]o provision of this part shall restrict the reasonable exercise of the police power of a municipality over the erection and maintenance of poles, wires, and other facilities of electric suppliers in streets, alleys, and public ways." *Id.*
177. *E.g.*, VT. STAT. ANN. tit. 24, § 4409 (1992); *cf.* TENN. CODE ANN. §§ 13-24-301, -303 (1992). Vermont law allows only the regulation of "size, height, bulk, yards, courts, setbacks, density of buildings, off-street parking and loading facilities and landscaping or screening requirements," unless a locality has made "reasonable provision . . . for the location of" public utility facilities. VT. STAT. ANN. tit. 24, § 4409(a) (1992). *But see infra* notes 199-201 and accompanying text (Vermont statute allowing local regulation interpreted by state supreme court to apply only when no relevant order of the state's public utility commission exists). Tennessee's partial preemption bars local governmental units from "exclud[ing] the location or relocation of any facility used to provide telephone or telegraph services to the public." TENN. CODE ANN. § 13-24-301 (1992). But the law further provides that "[t]he exclusion of location from local regulation does not preclude the exercise of reasonable municipal and county police powers including, but not limited to, permit requirements, landscaping, off-street parking or set-back lines as an exercise of police powers." *Id.* § 13-24-303.
178. State laws also afford electric utilities some measure of protection against arbitrary actions by local governments that may attempt to prevent the construction of new facilities by denying a utility use of public streets, sidewalks, and other rights-of-way for transmission lines. *See, e.g.*, ALASKA STAT. § 42.05.251 (1989); GA. CODE ANN. § 46-3-14(b) (1992).

Some states have not addressed the blanket preemption of local zoning power, but rather have exempted utilities from specific types of land use regulation.<sup>179</sup> Other states allow local regulation of utilities, except for specifically exempted utility facilities.<sup>180</sup> In some states, the preemption of local zoning authority is decided on a case-by-case basis under laws giving the state's public utility commission the power to override local zoning laws and decisions.<sup>181</sup>

Massachusetts and Rhode Island are two states that have zoning override laws. The Massachusetts law allows a utility to take the initiative by applying to the State Department of Utilities for an exemption from a local zoning ordinance.<sup>182</sup> Under the law, a utility is not obligated to apply for local approval before petitioning the state for an exemption.

Rhode Island law operates somewhat differently by effectively granting the state public utility commission an appellate review

179. *E.g.*, MD. CODE ANN., NAT. RES. § 5-1602(b)(5) (Supp. 1993) (utilities conditionally exempt from state forest preservation law).

180. *E.g.*, CONN. GEN. STAT. § 16-235 (West 1988); *cf.* MD. CODE ANN., NAT. RES. § 3-305 (1989 & Supp. 1993) (state purchase of sites for electric power generation plants); TENN. CODE ANN. §§ 13-18-101 to -128 (1992) (requiring local governments to participate in joint review of "major energy projects," and to make local regulatory decisions according to an established schedule). Connecticut law allows local governments "full direction and control over the placing, erection and maintenance of any [utility] wires, conductors, fixtures, structures or apparatus, including the relocation or removal of the same and the power of designating the kind, quality and finish thereof." CONN. GEN. STAT. § 16-235 (West 1988). However, such local control is preempted for any utility facility "under the jurisdiction of the department of public utility control, or the Connecticut siting council." *Id.*

181. *E.g.*, CONN. GEN. STAT. ANN. § 16-235 (West 1988); MASS. GEN. L. ch. 40A, § 3 (1979); N.J. REV. STAT. § 40:55D-19 (1991); R.I. GEN. LAWS § 39-1-30 (Supp. 1992); *cf.* ALASKA STAT. § 42.05.251 (1989) (public utility commission has authority to decide disputes between utilities and local governments over the use of public streets, alleys and other rights-of-way).

182. The Massachusetts law provides the following:

Lands or structures used, or to be used by a public service corporation may be exempted in particular respects from the operation of a zoning ordinance or by-law if, upon petition of the corporation, the department of public utilities shall . . . determine the exemptions required and find that the present or proposed use of the land or structure is reasonably necessary for the convenience or welfare of the public

MASS. GEN. L. ch. 40A, § 3 (1994). In considering a utility's request for an exemption, the state department of public utilities must balance local interest against the interests of the citizenry as a whole. *Save the Bay, Inc. v. Department of Pub. Utils.*, 322 N.E.2d 742, 757 (Mass. 1975). Utility companies in Massachusetts may avail themselves of the law's exemption procedure in conjunction with, or independently of, a proceeding for use of condemnation authority. *Town of Framingham v. Department of Pub. Utils.*, 244 N.E.2d 281, 284 (Mass. 1969).

function over local zoning decisions.<sup>183</sup> Thus, in Rhode Island, a public utility must attempt to obtain local zoning approval before the state commission can become involved via an appeal. The Rhode Island statute also gives the right of appeal to any aggrieved party, whereas the Massachusetts law provides for initiation of state agency proceedings only by the public utility.<sup>184</sup> Further, the Rhode Island statute, unlike the Massachusetts law, allows public utilities to “appeal” a local zoning law to the state commission, not just a zoning decision made *under* a local law.<sup>185</sup> This appeal provision effectively vests the state commission with veto authority over all local zoning legislation affecting public utilities.<sup>186</sup>

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183. The Rhode Island law provides in pertinent part:

Every ruling, decision, and order of a zoning board of review and of a building, gas, water, health, or electrical inspector of any municipality affecting the placing, erection, and maintenance of any plant, building, wires, conductors, fixtures, structures, equipment, or apparatus of any company under the supervision of the [public utility] commission, shall be subject to the right of appeal by any aggrieved party . . . . The commission . . . shall . . . determine the matter in question, weighing the consideration of public convenience, necessity, and safety against the consideration of public zoning, and shall have jurisdiction to affirm or revoke or modify the ruling, decision, or order to make any order in substitute thereof.

R.I. GEN. LAWS § 39-1-30 (1990). Even though appeals must be taken to the public utility commission, and not to superior court, the state supreme court still retains jurisdiction to review a local zoning board’s decision via common law certiorari. *Merciol v. New England Tel. & Tel. Co.*, 290 A.2d 907, 910 (R.I. 1972). The Rhode Island Supreme Court recently upheld this state law provision against a broad-based constitutional challenge. *See Town of East Greenwich v. O’Neil*, 617 A.2d 104, 114 (R.I. 1992).

184. R.I. GEN. LAWS § 39-1-30 (1990). Connecticut law similarly allows for appeals to a state agency, the department of public utility control, by aggrieved parties. CONN. GEN. STAT. § 16-235 (1988). The department may affirm, modify or revoke any local zoning “order” from which an appeal is taken. *Id.*

185. This portion of the Rhode Island law provides that

[e]very ordinance enacted, or regulation promulgated by any town or city affecting the mode or manner of operation or the placing or maintenance of the plant and equipment of any company under the supervision of the commission, shall be subject to the right of appeal by any aggrieved party . . . . The commission . . . shall determine the matter giving consideration to its effect upon the public health, safety, welfare, comfort, and convenience.

R.I. GEN. LAWS § 39-1-30 (1990).

186. By the terms of the Rhode Island statute, the state utility commission’s review authority extends only to companies “under the supervision of the commission.” *Id.* Because an electric facility that generates less than 500 MW is not under the utility commission’s supervision, no right of review exists under this statute for local zoning laws and decisions affecting such facilities. *City of East Providence v. Public Utils. Comm’n*, 566 A.2d 1305, 1308-09 (R.I. 1989).

## 2. Implied Preemption

Although every state does not have a law directly addressing the relationship between local zoning authority and the state public utility commission, every state does have a public utility commission, or an equivalent agency, to regulate electric utilities.<sup>187</sup> In some states where the law is silent on local zoning authority preemption, courts have held that the state regulatory scheme preempts local zoning power. Factors that have persuaded courts to find preemption include: (1) the authority of the public utility commission to issue certificates of need or similar approvals to utility projects;<sup>188</sup> (2) the granting of eminent domain powers to public utilities;<sup>189</sup> (3) whether the local zoning law under consideration is merely a guise to prohibit public utility facilities;<sup>190</sup> and (4) the particular subject matter of the local regulation.<sup>191</sup>

Indiana courts appear to have taken the implied preemption analysis further than other courts. In *Graham Farms, Inc. v. Indianapolis Power & Light Co.*,<sup>192</sup> the Supreme Court of Indiana held that public utilities may condemn and use land for any utility purpose without having to comply with local zoning laws.<sup>193</sup> The court found that the legislature intended to preempt local zoning authority based on (1) the broad regulatory powers granted to the state's public service commission, (2) the state grant of eminent domain authority to public utilities, which could use such authority without the approval of the public service commission, and (3) certain limiting

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187. See *supra* notes 65-78 and accompanying text.

188. E.g., *Howard County v. Potomac Elec. Power Co.*, 319 Md. 511, 524-26, 573 A.2d 821, 828-29 (1990).

189. See generally Allan Manley, Annotation, *Applicability of Zoning Regulations to Projects of Nongovernmental Public Utility as Affected by Utility's Having Power of Eminent Domain*, 87 A.L.R.3d 1265 (1978) (examining cases where courts have held that utilities possessing eminent domain power are not subject to local zoning ordinances).

190. E.g., *Cleveland Elec. Illuminating Co. v. Village of Mayfield*, 371 N.E.2d 567, 576 (Ohio Ct. App. 1977) (opining that electric utility could not be made to comply with certain local regulations where those regulations would raise the cost of constructing the facility "so appreciably that it [would] inhibit[] [the] project as a whole").

191. See, e.g., *Detroit Edison Co. v. Township of Richmond*, 388 N.W.2d 296, 300-01 (Mich. Ct. App. 1986) (holding that Township Rural Zoning Act did not empower township to enact safety regulations regarding electric transmission lines; local ordinance establishing (1) a minimum width for transmission line rights-of-way, (2) a minimum distance between high-voltage transmission lines and residential buildings, and (3) a maximum noise level for transmission lines was therefore invalid).

192. 233 N.E.2d 656 (Ind. 1968).

193. *Id.* at 664-65.

language in the state's zoning enabling legislation.<sup>194</sup> The court observed that "[i]t was to relieve public utilities from the burden of local regulation that the legislature created the Public Service Commission."<sup>195</sup> According to the court, "[w]hen local regulation attempts to control an activity in which the whole state or a large segment thereof is interested, local regulation must fall."<sup>196</sup>

Ten years later the Indiana Court of Appeals extended the *Graham Farms* holding by sustaining an injunction to restrain a county building commissioner from interfering with the construction of various public utility facilities, including an office building, storage tank, and water treatment plant.<sup>197</sup> The court held that the public utility did not have to obtain a building permit from the local government because state law preempted all local regulation of public utilities.<sup>198</sup>

Although Vermont courts have not addressed the issue of local building permit requirements, the Supreme Court of Vermont has ruled that public utilities do not need to obtain local zoning approval for construction of transmission lines and power generating plants authorized by a certificate of public good issued by the state's Public Service Board.<sup>199</sup> The court found preemption of zoning approval despite a state law authorizing local regulation of the "size, height, bulk, yards, courts, setbacks, density of buildings, off-street parking and loading facilities and landscaping or screening requirements"

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194. *Id.* at 665-67. The court noted that the Public Service Commission had a duty under state law to enforce the state's public utility act "as well as all other laws, relating to utilities," including the provision of law requiring utilities "to furnish reasonably adequate service and facilities." *Id.* at 666 (quoting provisions of the Indiana Code). The court stated that "[t]he commission would be powerless to order improved service if local zoning regulations are allowed to override the powers of the commission." *Id.* Concerning the state's zoning enabling statute, the court pointed to a legislative intent to create certain regulatory powers only over development "*not now otherwise controlled*," and thus to treat zoning powers as "supplemental to," and not abrogating the powers of, state agencies. *Id.* (quoting various provisions of the Indiana Code).

195. *Id.*

196. *Id.*

197. *Darlage v. Eastern Bartholomew Water Corp.*, 379 N.E.2d 1018, 1021 (Ind. Ct. App. 1978).

198. *Id.* at 1021. The court held that the "principles" of *Graham Farms* were controlling. *Id.* Because state law preempted all local regulation of public utilities, the court brushed aside arguments that the utility failed to exhaust administrative remedies, and that the trial court failed to make findings with respect to the existence or potential for irreparable injury or damage to the utility before issuing the injunction. *Id.*

199. *City of South Burlington v. Vermont Elec. Power Co.*, 344 A.2d 19, 25 (Vt. 1975).



associated with public utility facilities.<sup>200</sup> According to the court, the zoning authorization law applies only in the absence of a "relevant" order from the Public Service Board, because "[t]o hold otherwise would be to effectively preclude the construction" of utility transmission lines and power generating plants.<sup>201</sup>

In a similar examination of state law, the Court of Appeals of Maryland, in *Howard County v. Potomac Electric Power Co.*,<sup>202</sup> held that local governments are impliedly preempted from using local zoning powers to regulate the construction of transmission lines carrying in excess of sixty-nine kV.<sup>203</sup> The court based its decision on a state law requirement that the Public Service Commission (PSC) must approve high-voltage transmission lines.<sup>204</sup> The court also examined a provision in the state's enabling statute for home rule counties that stated "[t]he powers granted to the county . . . shall not be construed . . . [t]o preempt or supersede the regulatory authority of any State department or agency under any public general law."<sup>205</sup> The court found that together these state law provisions evidenced "a purposeful [legislative] intent to centralize and exclusively regulate the construction of transmission lines in excess of 69,000 volts."<sup>206</sup> In addition, the court reasoned that allowing counties to apply local zoning laws to transmission lines authorized by the PSC would sanction an authority superior to that of the PSC, thereby effectively bridling the PSC's statutory powers.<sup>207</sup>

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200. *Id.* at 25; see VT. STAT. ANN. tit. 24, § 4409(a)(1) (1992); see also *supra* note 177 and accompanying text (providing examples of state laws that authorize local zoning authority to regulate design of public utilities).

201. *South Burlington*, 344 A.2d at 25. On a public policy level, the court opined "that local municipalities should play a secondary role where a clash of authority appears to exist between state control and local control of a public utility furnishing a state-wide service." *Id.* at 24.

202. 319 Md. 511, 573 A.2d 821 (1990).

203. *Id.* at 524-30, 573 A.2d at 829-31. The 69 kV level is the voltage at which an electric utility in Maryland must obtain a certificate of public convenience and necessity from the state's public service commission. MD. ANN. CODE art. 78, § 54A (1991).

204. *Howard County/PEPCO*, 319 Md. at 524, 573 A.2d at 831 (citing MD. ANN. CODE art. 78, § 54A (1991)). The court noted that the standards the public service commission must apply under state law are essentially the same as the general standards that local zoning boards apply when considering a zoning special exception. *Id.* at 527-28, 573 A.2d at 829-30. These standards include public need and "the public safety, the economy of the state, the conservation of natural resources, and the preservation of environmental quality." *Id.* at 530, 573 A.2d at 831 (quoting MD. ANN. CODE art. 78, § 56 (1991)).

205. *Id.* at 529, 573 A.2d at 830 (quoting MD. ANN. CODE art. 25A, § 5(X)(2)(v) (1990)).

206. *Id.* at 530, 573 A.2d at 831.

207. *Id.* at 529, 573 A.2d at 830. In addition, the court noted that the power to require zoning special exceptions for transmission lines implied the power to

Although the Maryland court of appeals did not focus upon the state grant of eminent domain power to public utilities, courts in other states have analyzed whether such power implies a preemption of local zoning authority.<sup>208</sup> On the issue of whether preemption is implied by eminent domain authority, courts are divided into three camps. The first camp consists of courts that have found the grant of eminent domain power to public utilities to be a controlling or persuasive factor in preemption analysis.<sup>209</sup> Generally, these courts are sensitive to the ability of a municipality to deny rights-of-way for transmission lines, which the courts have equated with the ability "to thwart the utility in its mission to serve the general public."<sup>210</sup> The second camp consists of courts that have found states to have appropriately delegated both zoning authority and the power of eminent domain to electric utilities.<sup>211</sup> These courts reason that although a utility has power to condemn land, it cannot use land without considering local zoning laws.<sup>212</sup>

The middle ground, or third camp, is represented by those courts that have engaged in a case-by-case analysis, finding preemption only under certain circumstances.<sup>213</sup> Ohio courts, for example, have refrained from finding any blanket preemption of local zoning authority, preferring instead to analyze the extent of the burden that a particular regulation places on a public utility.<sup>214</sup> In general, a public

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deny such approvals based on considerations of "strictly local interests." *Id.* at 527, 573 A.2d at 829-30. Thus, "a local governing body that has the power to altogether exclude from its jurisdiction a transmission line which provides electrical service state wide is essentially regulating the public utility in a manner that may be antithetical to the interests of the rest of the state." *Id.* at 527-28, 573 A.2d at 830; *cf.* *Union Elec. Co. v. City of Crestwood*, 562 S.W.2d 344, 346 (Mo. 1978) (en banc) (application of local zoning ordinance to intercity transmission line "invaded the area of regulation and control vested in the Public Service Commission").

208. *See generally* Manley, *supra* note 189 (surveying cases in which courts have determined whether privately owned public utility with power of eminent domain is subject to local zoning regulations).

209. *See id.* at 1267.

210. *See id.*

211. *See id.*

212. *See id.*

213. *See id.* For example, one court found that eminent domain powers preempt local zoning authority only when the utility acquired the land in question prior to enactment of the restrictive zoning regulations. *See id.* Other courts have held local zoning laws were preempted in circumstances where it appeared such laws operated to exclude utilities. *Id.* In such cases, local zoning laws were seen as impermissibly destroying the eminent domain power of public utilities. *Id.*

214. *See, e.g., Cleveland Elec. Illuminating Co. v. City of Painesville*, 239 N.E.2d 75, 77-79 (Ohio 1968) (refusing to preempt local zoning regulation giving municipality the power to regulate construction of transmission lines when such

utility must comply with a reasonable municipal regulation if the regulation is local in effect, is not burdensome to the total operation of the line, and does not raise the cost of the project to the point of rendering construction impractical.<sup>215</sup> Thus, a municipality may review construction plans for an electric substation, including plans for landscaping and drainage, but the municipality may not require a change in the substation's location or "insist on conditions that will raise the cost so appreciably that it inhibits th[e] . . . project as a whole."<sup>216</sup>

In states with specific statutory enactments that provide for a petition or an appeal to the state public utility commission for an exemption from local zoning laws,<sup>217</sup> courts have been called upon to define the scope and nature of the state/local relationship. In *Town of Framingham v. Department of Public Utilities*,<sup>218</sup> the Supreme Court of Massachusetts held that the authority of the state's department of public utilities to exempt utility projects from local zoning regulations may be exercised independently of any decision to allow a utility to use eminent domain power.<sup>219</sup> In *Reid v. Iowa State Commerce Commission*,<sup>220</sup> the Iowa Supreme Court decided that a law allowing the State Commerce Commission to approve public utility facilities, regardless of whether the facilities comply with local zoning laws, extended to the proposed construction of a fly ash landfill on farmland several miles from an electric power

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construction did not meet health and safety welfare requirements of state statute); *Cleveland Elec. Illuminating Co. v. Village of Mayfield*, 371 N.E.2d 567, 576 (Ohio Ct. App. 1977) (commenting that reasonable local zoning regulation should not be preempted if it has only a local effect, does not affect transmission line as a whole, or raises costs such that construction of facility becomes impractical).

215. *Mayfield*, 371 N.E.2d at 576. However, Ohio law preempts local regulation of intercity transmission lines constructed in compliance with state safety standards. *Id.* at 575-76 (citing the provisions of OHIO REV. CODE ANN. § 4905.65 then in effect). Ohio law also expressly preempts counties and townships from regulating public utilities, but not local governments organized as municipal corporations. See OHIO REV. CODE ANN. §§ 303.211, 519.211 (Baldwin 1994) (counties and townships, respectively). In an unreported case, the Court of Appeals of Ohio noted the absence of any state law provisions preempting the zoning authority of municipal corporations. See *Cleveland Elec. Illuminating Co. v. City of Eastlake*, No. 6-049 (Ohio Ct. App. Dec. 27, 1977) (LEXIS, Allstate library, Ohio file).

216. *Mayfield*, 371 N.E.2d at 576.

217. See *supra* notes 181-86 and accompanying text.

218. 244 N.E.2d 281 (Mass. 1969).

219. *Id.* at 284-85. The court also held that the department's exemption authority may be exercised independently from any permits for street crossings obtained by the utility from local jurisdictions. *Id.*

220. 357 N.W.2d 588 (Iowa 1984).

plant.<sup>221</sup> A New Jersey court held constitutional the public notice provisions of a law giving the state's Board of Public Utility Commissioners the power to exempt utility projects from compliance with local zoning laws.<sup>222</sup> The law required notice to be given only to the affected municipality, and not to adjacent landowners.<sup>223</sup> The court held that lack of notice to neighboring property owners was not a due process violation, and further, that neighboring property owners were not indispensable parties at the proceedings before the state commission.<sup>224</sup>

In another New Jersey case, a public utility asked the state supreme court to reverse criminal convictions that resulted from two municipalities charging the utility with zoning violations for erecting a transmission line without obtaining local zoning approval.<sup>225</sup> The utility argued that New Jersey law totally preempts local zoning authority in the case of interjurisdictional transmission lines.<sup>226</sup> The court rejected this argument, and let the convictions stand.<sup>227</sup>

The court held that state law assigned the initiative to a public utility to seek a zoning exemption from the state commission.<sup>228</sup> A utility could not make a "decision on its own and act *ex parte* accordingly."<sup>229</sup> Doing so would deprive a municipality of its right

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221. *Id.* at 591; *cf.* New York Cent. R.R. v. Borough of Ridgefield, 201 A.2d 67, 74-75 (N.J. Super. Ct. App. Div. 1964) (holding moot utility's application to Board of Public Service Commissioners for zoning exemption for outdoor storage yard, because zoning ordinance did not apply to a public utility by its own terms). For the current version of this exemption provision, see IOWA CODE ANN. § 476A.5(3) (West 1991).

222. *In re* Jersey Cent. Power & Light Co., 327 A.2d 437, 440 (N.J. Super. Ct. App. Div. 1974).

223. *Id.* at 439.

224. *Id.* at 440. The court reached its decision despite the fact that the utility involved had previously applied to the municipality for a zoning special exception. *Id.* at 438. Neighboring landowners appeared at the zoning hearing to protest the special exception, which was ultimately denied. *Id.* The utility next petitioned the state commission for an exemption from the municipality's zoning ordinance, which the commission granted. *Id.* The neighboring landowners who protested at the zoning hearing before the municipality apparently did not find out about the application to the commission until the commission's decision was all but made. *Id.*

225. *See* State v. Jersey Cent. Power & Light Co., 262 A.2d 385, 386-87 (N.J. 1970).

226. *Id.* at 387-88. The utility acknowledged the existence of state law allowing the state's public utility commission to exempt utility projects from compliance with local laws, but argued that such law applied only to local utility projects, and not to interjurisdictional transmission lines. *Id.*

227. *Id.* at 389.

228. *Id.* at 388.

229. *Id.* at 389.

to have the commission consider local interests.<sup>230</sup> The court summarized the "heavy" responsibilities assigned to the utility commission by state law, noting that the commission's "obligation is not a perfunctory one; it is called upon to inquire diligently and act positively and affirmatively to properly discharge the duty . . . of accommodating local interests of consequence in the light of the broader public welfare which has to be served . . . ."<sup>231</sup> According to the court, accommodations of local interests would be proper "where important local considerations can be given recognition without sacrificing the wider public interest."<sup>232</sup>

## VI. A BALANCED APPROACH TO LOCAL REGULATION

As implicitly recognized by the Supreme Court of New Jersey in *State v. Jersey Central Power & Light Co.*,<sup>233</sup> the key to a balanced approach to local regulation of electric utilities is developing a regulatory framework that accommodates important local considerations in the context of the broader public welfare. For electric utilities, the broader public welfare is largely defined by the public demand for reliable, efficient and inexpensive electric service. This demand, which many citizens view as a fundamental right,<sup>234</sup> has given rise to a complex and pervasive federal and state regulatory web. However, federal and state regulation has historically ignored *local* concerns about adverse health effects, safety hazards, property value decreases, and aesthetics—concerns traditionally addressed by zoning laws enacted at the municipal level.

On the other hand, as the case law and the legislative history of some state preemption laws indicate, left to their own devices, municipalities have often been incapable of making local land use decisions that are sensitive to regional and statewide needs. In the case of electric utilities, local decisions have consistently failed to consider the operational constraints of electric power generation and distribution, as well as the federal and state regulatory mandates by which electric utilities must abide. Stated otherwise, sometimes local regulation goes too far.<sup>235</sup>

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230. *Id.* at 388. When the state commission considers a utility's exemption request, "local interests are to be considered and weighed with the broader public interest in the light of the [commission's] expertise." *Id.*

231. *Id.* at 389. The court noted that the Commission's duty "can frequently be done by the . . . imposition . . . of reasonable conditions designed to preserve relevant zoning considerations or to apply some, but not all, of local zoning ordinance provisions." *Id.*

232. *Id.*

233. 262 A.2d 385 (N.J. 1970).

234. *See supra* note 3.

235. *Cf.* Frank J. Popper, *The Great LULU Trading Game*, *PLANNING*, May 1992,

Nevertheless, blanket preemption of local zoning regulation of electric utility land uses also goes too far. Electric utilities and state regulatory agencies do not always make decisions that sufficiently consider and protect vital local interests. For example, in *Houston Lighting & Power Co. v. Klein Independent School District*,<sup>236</sup> an electric utility selected a route for a 345 kV transmission line that traversed property used as a campus for two public schools.<sup>237</sup> The state public utility commission approved the route, and issued a certificate of necessity.<sup>238</sup> The utility then exercised its condemnation powers, took a portion of the school property, and began to build the transmission line.<sup>239</sup>

The school board challenged the condemnation in court, arguing that routing a transmission line near a public school constituted "a callous disregard for the safety, health, and well-being of the 3,000 children" who were attending the schools.<sup>240</sup> The school board presented evidence that children in the intermediate school, approximately 300 feet from the transmission line, would be continually exposed to electromagnetic fields ranging in strength from six to ten milligauss.<sup>241</sup> A jury found for the school board.<sup>242</sup> On appeal, the Texas Court of Appeals sustained the jury's finding that the utility had abused its discretion in condemning the school property.<sup>243</sup> The appellate court upheld an actual damage award to the school board of \$104,275, and the utility ultimately had to dismantle and reroute that portion of its transmission line which traversed the schools' property.<sup>244</sup>

A balanced regulatory framework where local input is considered might have prevented the litigation in *Klein*. If the state's public utility commission had been presented with the school board's concerns, it might have required the electric utility to reroute its line as a condition

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at 15 (advocating the use of a locally administered point system allowing localities to control the LULUs in their communities). In discussing the need for a solution to the conflicts involved in siting locally unwanted land uses, the author notes that "[t]he problem is fast becoming a crisis." *Id.* This is in part because "LULU hysteria" has resulted in "LULU blockage." *Id.* at 17.

236. 739 S.W.2d 508 (Tex. Ct. App. 1987).

237. *Id.* at 511.

238. *See id.* at 512-13.

239. *Id.* at 511. The utility did not have to obtain local zoning approval because Houston had no zoning laws. *See supra* note 130.

240. *Klein*, 739 S.W.2d at 511.

241. *Id.* at 516.

242. *See id.* at 518.

243. *Id.* at 515-19.

244. *Id.* at 511, 521. However, the appellate court reversed a punitive damage award of \$25 million. *Id.* at 518-19. The court found that the utility's occupation of the school property was not a trespass because the utility had obtained approval from the state Public Utility Commission prior to exercising its condemnation authority. *Id.*

of the certificate of necessity, especially if the commission's deliberations were guided by a statute requiring evaluation of local conditions, including local land use laws.

Even if consideration by the public utility commission of the school board's concerns would not ultimately have prevented the *Klein* litigation, a balanced regulatory approach would have made resorting to the courts a last step. In addition, the court would have been engaged in the judicial review of an administrative agency decision, thereby defining a role for the court in the context of administrative law principles now generally familiar to all state judiciaries.<sup>245</sup> Thus, a balanced regulatory approach would have provided the court with the benefit of administrative agency expertise, exercised within a legal framework that establishes guidelines for weighing both local and broader public interests.

#### A. *The American Planning Association Approach to LULUs*

Much of the policy framework for a balanced regulatory approach can be found in the "policy implementation principles" promulgated by the American Planning Association (APA) to address locally unwanted land uses.<sup>246</sup> Among these principles, the APA recommends the creation of "sound planning processes in all LULU siting situations," including "recognition in local[,] state and regional comprehensive plans of the existence of LULUs, their social and community needs, and the locational criteria appropriate to each type of use."<sup>247</sup> Each comprehensive plan should provide a role for local jurisdictions in selecting sites for specific facilities.<sup>248</sup> Public study and participation should be part of a comprehensive planning process for LULUs, and "[p]lanning for LULUs should become a discrete element" of the comprehensive

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245. See, e.g., *Douglas County Bd. of Comm'rs v. Public Utils. Comm'n*, 829 P.2d 1303, 1307-13 (Colo. 1992) (discussing various administrative law principles in connection with appeal of decision by Utilities Commission to approve electric transmission line under state law provision allowing for Commission approval of reasonable utility extensions not in conformity with local land use plan); *Fischer v. Iowa State Commerce Comm'n*, 368 N.W.2d 88, 91-98 (Iowa 1985) (discussing various administrative law principles in connection with appeal of Commerce Commission's approval of franchise and granting of eminent domain power for construction of transmission line and substation); *Town of East Greenwich v. O'Neil*, 617 A.2d 104, 107-14 (R.I. 1992) (discussing various administrative law principles in connection with challenge to state law that authorizes the state's Public Utilities Commission to override local zoning ordinances).

246. See *An Update on LULUs*, PRIVATE PLANNING PERSP. (Am. Planning Ass'n Private Practice Div., Chicago, Ill.), Dec. 1991, at 2.

247. *Id.*

248. *Id.*

plan.<sup>249</sup> This discrete element should contain both “formal criteria” and “realistic timetables” for siting LULUs.<sup>250</sup>

The APA also recommends that local governments be encouraged “to update zoning ordinances to deal specifically with LULUs consistent with regional, state and federal laws and policies, where state legislation does not already cover the subject adequately.”<sup>251</sup> Further, state governments should adopt

appropriate state legislation upon which states can base their own mandatory LULU [siting] processes. This legislation should be based upon need, and should stress, among other possible methods[,] the concept of “regional fair share” [so that] a small number of communities are not overly burdened. The legislation should identify methods of cost/benefit distribution among local communities, assessment of local community values, mitigation appraisals and plans, approaches to community compensation and community involvement.<sup>252</sup>

Siting processes for LULUs should include “stringent safety and environmental standards” and should emphasize “developing hard scientific data to enable communities to avoid potential adverse health and safety impacts when siting LULUs.”<sup>253</sup>

In addition, LULU planning and siting processes should be “open, equitable, and [involve] frequent public participation . . . as early as possible in the planning process.”<sup>254</sup> Utilities and other nongovernmental developers should be encouraged to cooperate with local, regional, and state governments in the process.<sup>255</sup> Moreover, the planning and siting process should involve negotiations to assist communities negatively impacted by LULUs in receiving “benefits” to offset the negative impacts.<sup>256</sup> To the extent possible, the negotiations should provide an opportunity for community improvement as a result of accepting a LULU.<sup>257</sup>

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249. *Id.*

250. *Id.* at 6. The planning process also “should provide opportunities for exchange of information [among local and state governments] regarding siting experiences.” *Id.* at 2.

251. *Id.*

252. *Id.*

253. *Id.* at 6.

254. *Id.* at 2. Public participation should begin “during the process of defining the problem, assessing the need for the facility, identifying solutions, and eliminating the alternatives.” *Id.*

255. *Id.*

256. *Id.* at 2, 6.

257. *Id.* at 6.



*B. Elements of a Balanced Approach*

Achieving a regulatory framework for electric utility land uses that recognizes important local considerations in the context of a broader public welfare involves acknowledging the following factors: (1) the complex federal and state regulatory environment in which electric utilities must operate, (2) the regional and statewide needs for electric power, (3) the operational constraints of electric power generation and distribution, (4) the impacts that utility land uses may have on local land use plans and comprehensive zoning schemes; and (5) the impacts on abutting and nearby land uses, such as noise, aesthetic concerns, electromagnetic field exposure, and property value decreases.

The weight to be assigned to any individual factor, and the corresponding balance to be achieved among these and other relevant factors, may vary from state to state.<sup>258</sup> But each successful regulatory framework must recognize that the individual factors are interrelated, and that benefits bestowed in light of one factor will create costs to be borne in light of another. Adjusting these benefits and costs, and aligning local and regional interests, are important political tasks that must be approached comprehensively, rather than on an ad hoc basis. Elements of such a comprehensive approach should include: (1) state and/or regional utility planning; (2) mandated local utility planning; (3) specific state enabling and limiting legislation to guide local land use regulation of electric utility facilities; (4) reasonable local land use regulation, not antithetical to broader public interests; and (5) a provision of state law vesting the public utilities commission with authority to override denial of local zoning approvals for utility facilities on a case-by-case basis.

*1. State/Regional Planning*

Planning for major public utility improvements should be accomplished on a statewide and/or regional basis. Statewide plans should include specific criteria for siting both electric power generating plants and the high-voltage transmission lines that must link those plants with distribution facilities. To the extent possible, the plans should include timetables for the construction of such facilities. Plans should also include general criteria that local governments may use in establishing siting guidelines and regulatory standards for smaller utility facilities, including substations and other distribution facilities. Statewide plans should create and define a role for local government participation in decision making for the siting of major utility facilities. In addition,

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258. See 2 LEW WALLACE, *THE PRINCE OF INDIA* 78 (1893) ("Beauty is altogether in the eye of the beholder.').

the plan development and amendment process should encourage public participation.<sup>259</sup>

## 2. Local Planning

Local comprehensive plans should include a public utilities element that addresses the provision of electricity along with the more traditional subjects of public water, sewer, and storm drainage services.<sup>260</sup> Local plans should include siting guidelines for substations and other electrical distribution facilities, based on the criteria established in the statewide plan. Local plans could also include criteria addressing local concerns, such as the circumstances under which the undergrounding of electric lines in areas of new development is required. The electric utility serving a particular locality should be required to cooperate with the local government in developing the public utility element of the local comprehensive plan. If the local plan contains a consistency requirement applicable to public uses such as utilities,<sup>261</sup> the state public utility commission should have the authority to override local consistency determinations based upon the broader public interest.<sup>262</sup>

## 3. State Enabling/Limiting Legislation

Because electric power generating plants and high voltage transmission lines nearly always serve multiple local jurisdictions, state law

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259. See *supra* notes 248-50, 252, 254-57 and accompanying text.

260. See *supra* notes 247-50 and accompanying text.

261. Virginia imposes a local plan consistency requirement under state law. See, e.g., VA. CODE ANN. § 15.1-456(A) (Michie Supp. 1994). The Virginia consistency requirement provides that when a locality adopts a comprehensive plan, the plan "shall control the general or approximate location, character and extent of each feature shown on the plan." *Id.* For features not shown on the plan, including public utility facilities, the local planning commission must approve the proposal as being "substantially in accord" with the plan. *Id.*

262. See, e.g., COLO. REV. STAT. ANN. § 30-28-127 (West 1990); MD. ANN. CODE art. 66B, § 3.08 (1988). The Colorado statute provides:

After the adoption of a plan, all extensions, betterments, or additions to buildings, structures, or plant or other equipment of any public utility shall only be made in conformity with such plan, unless, after public hearing first had, the public utilities commission orders that such extensions, betterments, or additions . . . are reasonable and . . . may be made even though they conflict with the adopted plan.

COLO. REV. STAT. ANN. § 30-28-127 (West 1990). The Maryland law provides that public utility facilities cannot "be constructed or authorized" in a local jurisdiction "until the location, character, and extent" of such facilities have been submitted to and approved by the local planning commission as "consistent" with the plan. MD. ANN. CODE art. 66B, § 3.08 (1988). If, however, the utility involved is one that does not require financing authorization by the local legislative body, the planning commission's action may be overruled by the state board or commission having financing jurisdiction. *Id.*

should expressly preempt local regulation of such facilities. Even in the case of a power plant or transmission line that directly serves only one municipality, the regulatory requirements for interconnections, and the physical constraints of an interconnected system, still warrant state regulation of these major facilities. Accordingly, all necessary governmental approvals for power plants and transmission lines should be consolidated into the certificate of public convenience and necessity issued by the state public utility commission.<sup>263</sup>

However, state law should require the utility commission to consider the local impacts of a particular project. Both affected local governments and individual property owners residing adjacent to a proposed power plant or transmission line should have standing to present their views to the utility commission. Among the factors that the commission should consider are local land use plans, local zoning maps and regulations, existing adjacent land uses, and local environmental conditions. The commission should admit and consider evidence addressing alternative power plant locations and transmission line routes that would have less local impact, as long as the alternatives are technically equivalent and do not entail significantly greater costs.

In addition, state law should assign responsibility to the state's public utility commission to rule on, and to establish standards pertaining to, safety and health-related issues that are nonsite-specific. For example, construction, safety, and energy conservation standards generally do not need to be adapted to local conditions, and should be formulated at the state level. For the same reason, a state public utility commission could set noise limits for utility equipment. Evaluating the tentative correlation between exposure to electromagnetic fields and adverse health effects, and, if necessary, establishing standards for electric and magnetic field strengths, should also be done at the state level.<sup>264</sup> If individual municipalities were allowed to adopt a variety of differing electromagnetic field standards, the ability of electric utilities to carry out service mandates could be severely undermined.<sup>265</sup>

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263. See *supra* note 70 and accompanying text.

264. The Rhode Island General Assembly recently adopted a law entitled the Electric Transmission Siting and Regulatory Act. See R.I. GEN. LAWS §§ 39-25-1 to 39-25-3 (Supp. 1994). The Act authorizes the state's energy facility siting board "to establish rules and regulations governing construction within the state of high voltage transmission lines of 69 kV or greater." *Id.* § 39-25-3. Concerns about exposure to electromagnetic fields prompted passage of the Act. *Id.* § 39-25-2; see also *supra* note 122 (reproducing the text of the Act). Rhode Island also requires electric utilities to include information about electromagnetic fields in applications to the energy facility siting board for new facilities. See R.I. GEN. LAWS § 42-98-8(3) (Supp. 1994).

265. See *Town of East Greenwich v. O'Neil*, 617 A.2d 104, 112 (R.I. 1992) ("Compliance with [the local] ordinance would force [the utility] to transmute its electrical distribution network into an unwieldy leviathan that would un-

On the other hand, state law should include specific enabling provisions to allow local governments to subject nonpreempted utility land uses to at least some zoning and related land use control. Broad local discretion should be afforded for offices, vehicle and equipment storage yards, and similar land uses, because such uses are not subject to the same operational constraints as transmission lines and substations. More narrow local discretion should be allowed for other land uses, such as electric substations and distribution equipment. Typical zoning requirements, such as lot area, lot width, setbacks, height, lot coverage, buffering and landscaping, access, and off-street parking, should be allowed.<sup>266</sup> However, state law should require that these local controls not be exclusionary, and be developed with the special needs of utility facilities in mind. State law should also mandate that local comprehensive plans include a public utility element that specifically addresses the provision of electric service.<sup>267</sup>

#### 4. Local Zoning and Other Land Use Controls

Within the framework of state enabling legislation, local governments should adopt reasonable zoning and related land use regulations necessary to protect the local welfare. Appropriate regulations requiring the undergrounding of certain new utility lines should be permitted,<sup>268</sup> as should the use of zoning approval mechanisms such as the special exception for uses that include electric substations, which are needed in residential areas but which can adversely impact those areas if not designed and buffered properly.<sup>269</sup> In drafting and implementing local land use controls aimed at electric utility facilities, municipalities should attempt to implement the judicially perceived "favored status" of public utilities.<sup>270</sup> In other words, local laws should recognize the constraints affecting electric utilities, including federal and state regulation, regional needs for electric power, and the operational limitations of electric power generation and distribution.

#### 5. Override Authority of the Public Utilities Commission

The final element of a balanced regulatory approach should take the form of a state law provision that would allow an electric utility

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necessarily snake through many extra miles of the state."); *cf.* *Union Elec. Co. v. City of Crestwood*, 499 S.W.2d 480, 483 (Mo. 1973) (striking down local requirement that transmission lines be buried, because "a hodgepodge of methods of construction could result and costs and resulting capital requirements could mushroom" if municipalities could specify how utilities should design and install such lines).

266. *See supra* note 178 and accompanying text.

267. *See supra* notes 247-50, 260 and accompanying text.

268. *See supra* notes 85-87 and accompanying text.

269. *See supra* notes 88-98 and accompanying text.

270. *See supra* notes 136-39 and accompanying text.

to appeal the denial of local zoning approval to the state public utilities commission.<sup>271</sup> Vesting the state commission with such oversight authority protects utilities from unreasonable local regulation, and assures that selfish local interests do not prevail over broader public interests.<sup>272</sup>

Override authority should only be exercised, however, on a case-by-case basis, and only upon an appeal made by the affected utility after unsuccessful efforts to secure local approval. Allowing a utility to avoid applying for local zoning approval defeats the purpose of authorizing limited zoning authority in the first place. Similarly, if a utility believes that a local law is invalid because the law exceeds state enabling authority, a challenge should be heard by a court. Further, if a neighboring property owner is aggrieved by the grant of zoning approval to a utility, the neighbor's appeal should also be heard by a court. The public utilities commission should not be transformed into a "super" local legislature or a "super" zoning board of appeals.<sup>273</sup> The commission should have a role only when a utility claims that denial of local zoning approval is exclusionary, or otherwise fails to adequately take into account the broader public interest.

## VII. CONCLUSION

In the most fundamental sense, promoting the broader public interest is the primary reason to implement a balanced regulatory approach to local zoning regulation of electric utilities. Because of the unique nature of the electric power industry, application of local zoning laws to the industry's physical facilities in the same manner, and to the same extent, as the application of zoning laws to other land uses has proved unworkable. Even so, preempting all local zoning control is too radical a measure, because such a preclusion risks shortcomings that a restricted form of local oversight could prevent. Thus, a balance is needed.

Elements of an appropriate balance include: (1) preemption of local control over the siting of regional facilities, such as electric power generating plants and high-voltage transmission lines; (2) a system of checks on local control of the siting of other facilities,

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271. For one such provision of state law, see *supra* note 183 and accompanying text, describing the authority of the Rhode Island Public Utility Commission.

272. See, e.g., *supra* notes 128, 235 and accompanying text (commenting upon the difficulties that may be encountered when localities are permitted to engage in zoning regulation); *cf.* Popper, *supra* note 235, at 17 (LULU blockage "demonstrates the triumph of local selfishness over broader . . . values").

273. See *supra* notes 182-86 and accompanying text (comparing Massachusetts law with Rhode Island law).

including electric substations and primary distribution lines; (3) reasonable local regulation of the site design components typically addressed by zoning ordinances, including lot size, setbacks, bulk, height, and buffers; and (4) case-by-case review and preemption authority vested in a state agency, such as a public utilities commission, over local zoning decisions found to conflict with the essential requirements of an efficient, reliable electric power system.

A balanced approach is consistent with meeting the critical needs of aligning local and broader-based interests, and coordinating society's economic and environmental goals. A balanced regulatory approach is also consistent with the basic public interest inherent in both the concept of a public utility and the exercise of local zoning powers. Without a proper balance, resources will be wasted, burdens and benefits will not be fairly shared, and the broader public interest will not be served.

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