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June 12, 2024

Via: Overnight Delivery

Supervisor Michael S. Cazzari and Members of the Town Board Town of Carmel Town Hall 60 McAlpin Avenue Mahopac, NY 10541

Re: Battery Energy Storage System Moratorium

Dear Supervisor Cazzari and Members of the Town Board,

Please be advised that our firm represents the Board of Directors of the Preserve at Somers Homeowners Association ("the Preserve"). The Preserve is a homeowners association consisting of 188 homes located in Somers, adjacent to Lounsbury Dr. and the southern border of the Town of Carmel. We are writing on the Preserve's behalf regarding the proposed amendment to the Town of Carmel Zoning Code to impose a moratorium suspending all pending and future battery energy storage system land use applications, including the 116-megawatt facility proposed by East Point Energy nearly adjacent to the Town of Carmel's border with the Town of Somers, where the Preserve at Somers is located.

The Preserve is concerned for the potential risks associated with battery energy storage systems and believes that the Town of Carmel has a responsibility to consider the potential impacts both to its own community and to its neighbors. The potential risks are underscored by the ongoing State study of recent battery energy storage system fires and review of the State codes and regulations to address the same. Accordingly, this Board should adopt the proposed



resolution imposing a six-month moratorium on the review of all pending and future land use applications for battery energy storage systems at the Town Board Public Hearing on June 19, 2024 to study this new use and review and amend the Town Code and Comprehensive Plan accordingly.

Imposing a moratorium upon any pending or future battery energy storage system applications while the Town studies and analyzes the potential dangers these systems present and revises and amends the Town Code and Comprehensive Plan accordingly is a valid exercise of the Town's police power.

Pursuant to guidance from the New York State Department of State Division of Local Government Services, the enactment of temporary restrictions, or a moratorium, is a valid exercise of police power where those restrictions are reasonable and related to public health, safety, or general welfare. A copy of the Department of State Land Use Moratoria Guidance is enclosed for your convenience. In *Charles v Diamond*, the New York State Court of Appeals held that temporary restraints necessary to "promote the over-all public interest" are permissible. *Charles v. Diamond*, 41 N.Y.2d 318, 324 (1977).

In *Laurel Realty, LC v. Planning Board of Town of Kent*, the Appellate Division upheld the Town's moratorium of over eight months, finding that the moratorium was a valid stopgap or interim measure to temporarily halt development while the Town considered updates to its master plan and comprehensive changes to its zoning ordinance. *Matter of Laurel Realty, LLC v. Planning Bd. of Town of Kent*, 40 A.D.3d 857, 860 (2d Dep't 2007).

Further, a moratorium on land use approvals is applicable to both unfiled, future applications *and* pending applications. In *Home Depot U.S.A., Inc. v. Village of Rockville Center*,



Home Depot had begun the building permit application process when the Village enacted certain amendments to its zoning code, imposing specific review procedures. Home Depot commenced a proceeding to compel the Village to issue its building permit after being informed that its application was subject to further review based on the new amendments. After Home Depot commenced its action, the Village enacted a six-month moratorium on the issuance of any building permits for the development of commercial property occupying a gross floor area of 40,000 square feet or more. The Court held that this was a valid exercise of police power and a legitimate response to the uncertainty created by Home Depot's challenge to the application of the zoning amendments to its pending application. *Matter of Home Depot U.S.A., Inc. v. Vill. of Rockville Ctr.*, 295 A.D.2d 426, 428 (2d Dep't 2002).

Battery energy storage systems are a new technology and a new use of land. As discussed below, there is a risk that a fire or explosion may result from a battery energy storage system. Therefore, municipalities should consider how battery energy storage systems may put the surrounding communities at risk and take the time to draft new regulations restricting the use to mitigate potential risks.

Battery Energy Storage Systems can result in fire and even explosions, posing a significant risk to public safety and general welfare.

Battery energy storage systems are a developing technology and pose a significant risk of fire and explosion to surrounding areas. As this Board is aware, there were three fires at battery energy storage systems in New York State alone last summer, specifically in East Hampton in Suffolk County on May 31, in Warwick in Orange County on June 26, and in Lyme in Jefferson County on July 27. These facilities were all much smaller than the one East Point Energy is currently proposing to operate in the Town of Carmel, 5 megawatts, 20 megawatts, and 12



megawatts respectively. As discussed further below, these fires prompted New York State Governor, Kathy Hochul, to organize the "Inter-Agency Fire Safety Working Group" to ensure the safety and security of battery energy storage systems across the state.

On the federal level, the Federal Emergency Management Agency (FEMA) awarded a research grant to the University of Texas at Austin to address firefighters' safety concerns when responding to battery energy storage system fires.¹ Lithium battery cells can experience "thermal runaway" which causes the cells to release very hot, flammable, toxic gases. Failure of one cell can cascade to other cells and the gases released can result in an explosion or a difficult to extinguish fire. Fire services do not have a way to cut off the gas supply and are unaware of, or are inexperienced with battery, energy storage system fire and explosion hazards. The University of Texas research team reported that the commercial entities owning the battery systems were equally unfamiliar with the potential fire hazards and that many questions remained regarding the toxicity of battery vent gas.

Finally, the Somers Fire District Board of Fire Commissioners wrote a letter to the Town of Carmel Planning Board dated April 15, 2024, expressing its concerns regarding East Point Energy's current battery energy storage system proposal. The Somers Fire District was especially concerned about the need to adequately train firefighters who are currently unequipped and unprepared for battery energy storage system fires, the cost of appropriate equipment and gear, and the number of firefighters required to continuously monitor the area as the fires smolder and batteries slowly cool. A copy of the Somers Fire District Board of Fire Commissioners letter is enclosed for your convenience.

¹ Federal Emergency Management Agency, "Emerging Hazards of Battery Energy Storage System Fires" (October 27, 2020), <u>Emerging Hazards of Battery Energy Storage System Fires | FEMA.gov</u>.



Given the potential risks that battery energy storage systems pose to public safety and general welfare, this Board should enact the proposed moratorium so that it may consider how to address and mitigate those risks by reviewing and revising its Zoning Code and Comprehensive Plan.

This Board should review and amend its Zoning Code and Comprehensive Plan to address the specific land use needs and safety risks associated with battery energy storage systems.

Installing and maintaining battery energy storage systems is a new use that is not currently addressed by the Town of Carmel's Zoning Code. Nor, as discussed below, are battery energy storage systems adequately addressed by New York State's own codes and regulations. The State is currently reviewing its codes and regulations to address this use and local municipalities have a responsibility to do the same. Moratoria are an appropriate tool for municipalities to use to maintain the status quo while implementing long-term planning surrounding battery energy storage systems.

As referenced above, Governor Hochel organized the Inter-Agency Fire Safety Working Group (the "Working Group") to ensure the safety and security of battery energy storage systems across the state, directing the Division of Homeland Security and Emergency Services, Office of Fire Prevention and Control, New York State Energy Research and Development Authority, New York State Department of Environmental Conservation, Department of Public Service, and the Department of State to lead the Working Group to independently examine battery energy storage facility fires and safety standards.



The Working Group was charged with the following tasks subsequent to the 2023 battery energy storage system fires, including:

- Conduct an Incident Analysis for East Hampton, Warwick, and Chaumont [Solar Farm in Lyme] incidents inclusive of:
 - a) Examining testing for contaminants and report out a summary of findings (complete, December 2023)
 - b) Reviewing emergency response actions and data (in progress)
 - c) Accessing and examining Root Cause Analysis (in progress)
 - d) Compile all preliminary Working Group findings, data, and other relevant materials and send to National Labs to review (in progress)
- Conduct a full review of today's Codes, Standards, and Regulations and provide a summary of recommendations. (draft complete, January 2024)
- Conduct field assessments of in-service commercial energy storage projects and revise NYSERDA inspection checklist with lessons learned. (in progress)
- 4) Create a final report that summarizes all the findings and recommendations of the Working Group. The findings and resulting recommendations will establish New



York as a national and international leader in fire safety and stationary energy storage systems. (in progress)²

The Working Group has since published its *draft* recommendations pursuant to the second task. Those recommendations will be revised pursuant to public comment and re-released for further public comment this month, June of 2024. Otherwise, the Working Group has yet to complete most of the above tasks. This Board should forestall any pending battery energy storage applications while considering the Working Group's draft recommendations. This Board should also consider extending the proposed moratorium pending the Working Group's finalized recommendations and final report.

The Working Group's draft recommendations, consisting of fifteen recommendations in total, consist of suggested updates and additions to the Fire Code of New York State ("Fire Code") and other additional concerns. A copy of the (draft) Fire Code Recommendations is enclosed for your convenience. These draft recommendations demonstrate that battery energy storage system technology is a developing technology, that the causes of battery energy storage system fires are not fully understood, and that the current codes and regulations are not sufficient to regulate this new technology. While these recommendations are generally made for the benefit of the State government, they are also relevant to local approval of battery energy storage system applications and should be considered by this Board. Accordingly, please find below a summary of some of the draft recommendations and their relevance to municipal approval of battery energy storage systems.

² New York's Inter-Agency Fire Safety Working Group <u>New York's Inter-Agency Fire Safety Working Group -</u> <u>NYSERDA</u>.



The Working Group first recommends requiring industry-funded independent peer review for all projects to assist agencies in reviewing permitting documents and the ensure proper compliance and oversight. This new requirement would specifically benefit permitting agencies that may not have the necessary expertise to review these projects. The Working Group also recommends additional industry-funded independent inspections during the installation of the systems.

The Working Group also recommends explosion control requirements be expanded to include "non-enterable BESS units" or "cabinets" and to eliminate the current perceived exemption for "BESS cabinets" by including cabinets in all Fire Code requirements are currently limited to rooms, areas, or walk-in units. These recommendations are especially relevant because East Point Energy's current application to install battery "containers" that, under the current Fire Code may be exempt from certain requirements. For this reason alone the Board should adopt the moratorium pending revision of the State Fire Codes to specifically address battery energy storage system cabinets and containers.

The Working Group made several recommendations regarding monitoring specifically, including that battery energy storage systems be monitored by a Network Operations Center, installation of closed-circuit television systems, and monitoring of fire detection systems by a central station service alarm system. The Working Group also recommended requiring emergency response plans, annual local first-responder training, and that qualified personnel be available for dispatch within 15 minutes and able to arrive on scene within four hours to provide support to local emergency responders. Local municipalities like the Town of Carmel should consider coordinate zoning amendments with local emergency responders to ensure sufficient monitoring, notification systems, and training plans are in place.

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Finally, the Working Group recommended requiring Original Equipment Manufacturers to conduct and disclose "Root Cause Analysis" and establishing guidance for water supply requirements. However, the Working Group report stated that these considerations may not be appropriate for the Fire Code itself. Accordingly, local authorities should consider whether to include a requirement in local zoning for the Original Equipment Manufacturers, as well as the commercial entity that owns the battery energy storage system, to conduct and disclosing a Root Cause Analysis and consider whether their local water supply is sufficient for battery energy storage system needs.

In addition to considering the States' recommendations, the moratorium would allow the Town Board time to consider and study how other municipalities have revised their codes and regulations to account for this new use. For example, the Town of Yorktown has adopted regulations requiring a special permit to operate battery energy storage systems of a certain size, imposing battery energy storage system specific requirements on any battery energy storage system site plan applications. A copy of Section 300-81.5 of the Yorktown Zoning Code is enclosed for your consideration. Finally, New York State Senator Peter Harkham has promised to introduce new legislation to ensure sound citing and storage system safety.³

Given the developing body of laws and regulations and the ongoing studies of this developing technology, this Board should adopt the proposed moratorium and take the time to consider where, if at all, this new use should be permitted to take place in the Town of Carmel and how the Board should regulate that use to ensure the Town and its neighbors' safety.

³ Mid Hudson News, *Harkham endorses Carmel battery farm moratorium* (May 30, 2024), https://midhudsonnews.com/2024/05/30/harckham-endorses-carmel-battery-farm-moratorium/.



If you have any questions or concerns you can contact me at 914-666-8033 or via email at swaldinger@kiscolaw.com.

Respectfully submitted,

Steven E. Waldinger

Enclosures



Land Use Moratoria

JAMES A. COON LOCAL GOVERNMENT TECHNICAL SERIES

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James A. Coon

The James A. Coon Local Government Technical Series is dedicated to the memory of the former Deputy Counsel of the Department of State.

Jim Coon devoted his career to assisting localities in their planning and zoning, and to helping shape the state municipal statutes. His outstanding dedication to public service was demonstrated by his work and his writings, including the work, *All You Ever Wanted to Know About Zoning*. Jim also taught land use law at Albany Law School. His contributions in the area of municipal law were invaluable, and immeasurably improved the quality of life of New Yorkers and their communities.

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A land use moratorium is a local enactment which temporarily suspends a landowner's right to obtain development approvals while the community considers and potentially adopts changes to its comprehensive plan and/or its land use regulations to address new circumstances not addressed by its current laws.

A moratorium on development therefore preserves the *status quo* while the municipality updates its comprehensive plan. A moratorium is designed to halt development temporarily, pending the completion and possible adoption of more permanent, comprehensive regulations.

The objective of municipal land use controls is to promote community planning values by properly regulating land development. It follows that land use controls work best when built upon a carefully considered comprehensive plan. It takes time to put together or to update a good community plan. During this time, demand for a particular use of land may arise for which there are inadequate or nonexistent controls. If the community allows development during that time, the ultimate worth of the eventual plan could be undermined. For these reasons, moratoria and other forms of interim zoning controls are often needed to "freeze" development until a satisfactory final plan or regulations are adopted.

THE CONCEPT OF MORATORIA

The enactment of temporary restrictions on development has been held to be a valid exercise of the police power where the restrictions are reasonable and related to public health, safety or general welfare¹. Local governments can enact a moratorium for a broad range of reasons.

Why adopt moratoria?
Prevent rush to development
Prevent inefficient and ill-conceived growth
Address a new kind of use (ie- wind farms, solid waste facilities, big box stores) in comprehensive plans and land use laws
Prevent hasty decisions that would disadvantage landowners and the public
Prevent immediate construction that might be inconsistent with the provisions of a future plan

The moratorium may be general, imposing a ban on all development approvals throughout the community, or specific to one land use or to a particular zoning district. For example, a moratorium can halt: the review of projects currently before boards; acceptance of new development applications (site plan, subdivision, special permit); and/or issuance of water and sewer connection permits.

Municipalities that adopt moratoria often exempt certain activities. A common exemption is for landowners whose construction applications have been approved. Construction of single-family homes and minor additions to them, such as garages, have been exempted from the moratorium.

LAND-USE MORATORIA DISTINGUISHED FROM GENERAL POLICE POWER MORATORIA

Land Use Moratoria

The most common type of moratorium is on land use approvals. Land use moratoria are designed to preserve the status quo while planning or zoning changes are made: these moratoria are often known as "stopgap" or "interim" zoning. These enactments are appropriate mechanisms for addressing long range community planning and zoning objectives. Moratoria can also be imposed on other land use controls including subdivision plat review and issuance of building permits.

The New York zoning enabling laws do not contain any specific mention of "moratorium" or "moratoria." Early on in the history of zoning, however, the New York Court of Appeals gave some

indication that any zoning regulation could temporarily and lawfully limit an owner's ability to use land profitably, so long as the regulation furthers the community's long-range planning goals.²

By enacting a land use moratorium, the local

"it would be a rather strict application of the law to hold that a city . . . cannot . . . take reasonable measures temporarily to protect the public interest and welfare until an ordinance is finally adopted. Otherwise, any movement by the governing body . . . would . . . precipitate a race of diligence between property owners, and the adoption later of the zoning ordinance would in many instances be . . . like locking the stable after the horse is stolen." [Downham v. Alexandria]

government temporarily suspends a landowner's right to build or to obtain development approvals while the community considers adopting changes to its comprehensive plan and/or its land use regulations. Quite often these contemplated changes will address new circumstances not dealt with in the municipality's current land use laws. A moratorium on development can preserve the *status quo* while the municipality updates its comprehensive plan or its zoning.

"Stopgap zoning" is addressed in a number of early zoning cases that arose in other states. In perhaps the most widely cited of these, Downham v. City *Council of Alexandria*,³ the court stated, "it would be a rather strict application of the law to hold that a city, pending the necessary preliminaries and hearings . . . cannot, in the interim, take reasonable measures temporarily to protect the public interest and welfare until an ordinance is finally adopted. Otherwise, any movement by the governing body of the city to zone would, no doubt, frequently precipitate a race of diligence between property owners, and the adoption later of the zoning ordinance would in many instances be without effect to protect residential communities--like locking the stable after the horse is stolen."

In the case of *Lo Conti v. City of Utica*, *Dept. of Buildings*,⁴ the Supreme Court, Oneida County recognized the validity of a moratorium in concept, but struck down the City of Utica's moratorium on building permits due to the city's failure to comply strictly with the notice provisions of the State enabling legislation. The judge aptly stated:

> "In order to prevent a race by property owners to obtain building permits when it has become common community knowledge that a zoning ordinance is being considered which may affect the uses to which they may put their property, municipalities have

adopted interim or stop-gap ordinances which impose a moratorium on the issuance of certain types of permits during the pendency of the proposed new zoning ordinance. The validity of this type of ordinance has been upheld by the courts."

General Police Power Moratoria

Where immediate health and safety problems are at issue, the general "police power", not zoning, is the appropriate source of authority for a moratorium. The police power is the authority possessed by municipal governments to take action to advance the public health, safety and welfare. While land use regulation itself is an exercise of the police power, the term is more commonly employed in reference to other forms of municipal laws or ordinances.

A municipally-imposed moratorium on development activity can address inadequacies in public infrastructure, or deal with dire threats to the community health, safety or welfare. In Belle Harbor Realty Corp. v. Kerr,⁵ the Court of Appeals upheld the revocation of a building permit due to an inadequate municipal sewer system. The court found that the revocation was a legitimate exercise of general police power and was not limited by constraints on zoning authority. The Court articulated a three-prong test to address temporary restrictions imposed by a municipality under the general police power in response to an immediate health and safety problem. To justify temporary interference with the beneficial use of property, the municipality must establish that:

> It acted in response to a dire necessity;
> Its action is reasonably calculated to alleviate or prevent a crisis condition; and
> It is presently taking steps to rectify the problem.

"When the general police power is invoked under such circumstances it must be considered an emergency measure and is circumscribed by the exigencies of that emergency" said the Court.⁶ The three-prong test may not apply when the landholder retains reasonable use of the property.⁷

In the case of *Charles* v. *Diamond*,⁸ a landowner challenged a moratorium on sewer connections to the village sewer system which prevented him from developing an apartment complex. The moratorium, read in combination with another village law requiring that such buildings had to be connected to the village sewage system, effectively halted all apartment construction until the village corrected the deficiencies in its sewer system. Without reaching the merits, the Court of Appeals recognized:

"A municipality has ample power to remedy sanitation problems including difficulties presented by inadequate treatment or disposal of sewage and waste. Inadequate systems of sewage disposal present not only ecological and aesthetic problems, but may pose direct and immediate health hazards. The municipal power to act in furtherance of the public health and welfare may justify a moratorium on building permits or sewer attachments which are reasonably limited as to time. Temporary restraints necessary to promote the overall public interest are permissible. Permanent interference with the reasonable use of private property for purposes for which it is suited is not."9

The Court in *Charles v. Diamond* held that where a municipality first requires that new development hook-up to public sewers and then imposes a temporary restraint on residential sewer

connections, the municipality can be sued for damages if it engages in unreasonable delay in improving its public sewer system and be assessed consequential damages resulting from such delay. Writing for the majority, Judge Jasen concluded:

> "[W]here the municipality has affirmatively barred substantially all use of private property pending remedial municipal improvements, unreasonable and dilatory tactics, targeted really to frustrate all private use of property, are not justified. The municipality may not, by withholding the improvements that the municipality has made the necessary prerequisites for development, achieve the result of barring development, a goal that would perhaps be otherwise unreachable."

In Westwood Forest Estates, Inc. v. Village of South Nyack,¹⁰ the Court of Appeals struck down a village zoning regulation which prohibited the construction of apartments in the village. The zoning ordinance had been enacted in order to forestall any future problems with the village's inadequate sewerage system. The Court reasoned that the village could have addressed the immediate problem through more appropriate police power regulations affecting all users of the sewer system. Instead, the village chose to use its zoning power, improperly in the court's view, to single out a particular type of land use. The court found it impermissible to single out one landowner to bear a heavy financial burden because of a general condition in the community. In his opinion, Judge Breitel indicated that "a moratorium on the issuance of any building permits, reasonably limited as to time," would have been a more legally defensible approach for the village to have taken.

With these three decisions, the Court of Appeals

drew a clear distinction between emergency actions to address immediate health or safety problems, on the one hand, and zoning or land use actions intended to address long-term issues of growth and development, on the other. By distinguishing the police power issue from the zoning issue, the Court of Appeals sharpened the focus on the standards applicable to land use moratoria. Land use moratoria are appropriate mechanisms for addressing long-range community planning and zoning objectives. But where immediate health and safety problems are at issue, they are not a permissible approach. Instead, other police power controls must be used. Those controls, whether legislative or administrative in nature, must not single out particular types of land use, but must instead address the immediate problem itself, and in a way which is fair to all landowners.

"GROWTH-CAPPING" LAWS

"Growth-capping" laws are designed to limit, *but not to halt*, development, pending the upgrading of capital improvements in the community. These laws control development by allowing a predetermined amount of growth within a defined

period. The purpose of growth-capping laws is to assure that development does not outpace planned improvements. In contrast, a moratorium is designed to *halt* development for a certain period, to maintain the status quo.

The landmark "growthcapping" decision is *Golden v. Planning Board of the Town of Ramapo*,¹¹ decided by The purpose of growth capping laws is to assure that development does not outpace planned improvements. By contrast, a moratorium is designed to halt development for a certain period, to maintain the status quo.

the Court of Appeals in 1972. In its decision, the Court upheld the town's 18-year phased-

development plan, which placed growth restrictions of varying durations on certain areas of the town. The restrictions could be lifted prior to expiration only if a developer were to provide certain public improvements during the interim period. The majority opinion did not employ the term "moratorium." Development was possible under certain conditions, so the law did not impose a moratorium. Nonetheless, the Court set forth a principle that would later be applied to moratoria as well: "where it is clear that the existing physical and financial resources of the community are inadequate to furnish the essential services and facilities which a substantial increase in population requires, there is a rational basis for 'phased growth' . . . "

The town enacted a zoning amendment which prohibited residential subdivision plat approval until certain public infrastructure had first been installed either by the town or the developer by means of securing a special permit or a variance. To acquire a special permit, the developer was required to accumulate 15 points based on the provision of five essential facilities or services: (1) public sanitary sewers or approved substitutes; (2) drainage facilities; (3) improved public parks or recreation facilities, including public schools; (4) State, county or town roads-major, secondary or collector; and, (5) firehouses. The plan allowed the developer to provide the required services at his or her own expense; this enabled the developer to accumulate 15 points and receive approval of the special permit and subdivision plat. Without contributing towards these town's facilities, a developer might have to wait up to 18 years to obtain subdivision approval.

Phased growth was necessary because the town's "basic services and improvements are inadequate and their reasonable cost cannot be presently absorbed" by town residents. The court recognized that "[t]he undisputed effect of these integrated efforts in land use planning and development is to provide an over-all program of orderly growth and adequate facilities through a sequential development policy commensurate with progressing availability and capacity of public facilities." Any delay in residential development occasioned by phased growth amendment was temporary. The Court concluded: "In sum, where it is clear that the existing physical and financial resources of the community are inadequate to furnish the essential services and facilities which a substantial increase in population requires, there is a rational basis for 'phased growth' and hence, the challenged ordinance is not violative of the Federal and State Constitutions."

In 1989, the Town of Clifton Park adopted a "Phased Growth Law" that limited the number of building permits obtainable in any year in a designated development area to 20% of the total units approved for any given project. The development area encompassed roughly 10% of the town's total land area. By its terms, the law was to remain in effect until a particular highway interchange was to have been completed, but in no case could it exceed five years. Upon challenge, the Appellate Division, Third Department, held the law to be a legitimate exercise of the Town's zoning power. The court said it addressed a situation where there existed "ample evidence that the designated area has a major traffic problem and the new home construction in the area is the primary contributor to this congestion."12

"Phased growth" laws generally do not amount to a total prohibition on construction, and are mentioned here by way of contrast with true moratoria. The courts have held that the capping of development is a valid exercise of the zoning power when it is employed in a fair and reasonable manner, even if the limitation lasts longer than an outright moratorium would.

BASIC REQUISITES OF LAND USE MORATORIA

As stated above, the New York zoning enabling statutes contain no mention of the word "moratorium." In holding moratoria to be lawful, the cases have suggested that five (5) key elements are requisite for a legally defensible moratorium. The land use moratorium should:

> 1) have a <u>reasonable time frame</u> as measured by the action to be accomplished during the term;

2) have <u>a valid public purpose</u> justifying the moratoria or other interim enactment;

3) address a situation where the burden imposed by a moratorium is being shared substantially by the public at large;

4) <u>strictly adhere to the procedure for</u> adoption laid down by the enabling acts; and

5) have a <u>time certain</u> when the moratorium will expire.

1) Reasonable Time Frame.

The courts will look carefully to see that the terms of a moratorium express a relatively short but specific duration, and that the duration is closely related to the municipal actions necessary to address the underlying issues. The U.S. Supreme Court has recognized the difficulty of selecting a fixed time frame for moratoria.¹³ However, courts have historically had little patience with municipal delay in carrying out the comprehensive planning, law adoption or facilities expansion for which the moratorium was enacted. The courts have disallowed moratoria where the time period was excessively long or unfixed.

In its 1974 decision in Lake Illyria Corporation v.

Town of Gardiner,¹⁴ the Appellate Division, Third Department, struck down a moratorium. In order to halt development pending the adoption of a new comprehensive zoning ordinance, the Town had since 1968 annually enacted moratoria prohibiting any use of property except for residential purposes unless a variance was obtained. The plaintiff brought suit, challenging the validity of the latest local enactment renewing the moratorium. The Court's opinion stated:

"The purpose of 'stop-gap' zoning is to allow a local legislative body, pending decision upon the adoption of a comprehensive zoning ordinance, to take reasonable measures temporarily to protect the public interest and welfare until an ordinance is finally adopted. Otherwise, the eventual comprehensive zoning ordinance might be of little avail."

"While it might be deemed a proper exercise of power for the town to freeze building uses when the town is [a]ctively engaged in the enactment of a comprehensive zoning law, the present case demonstrates the potential abuse of such a process by long delay...., and throughout this period of time the only [m]eaningful progress towards the preparation of a comprehensive plan has taken place relatively recently...."

"A course of conduct such as that followed by the Town herein is plainly contrary to the purpose of interim or 'stopgap' zoning. Under the present circumstances, the absence of justification for such an exercise of power renders this four-year delay unreasonable."¹⁵

Until the *Lake Illyria* decision, the courts had recognized the validity of moratoria for the purpose of a community's development of permanent new zoning regulations. *Lake Illyria*, however, made it a distinct requirement that, during the moratorium on land use approvals, the community must be actively engaged in the development of either a comprehensive plan or land use regulations.

In dealing with the issue of the reasonable duration of a moratorium in *Lakeview Apartments v. Town of Stanford*,¹⁶ the Appellate Division, Second Department, in 1985 struck down the town's moratorium which had lasted more than five years because it exceeded a reasonable duration. What was unusual about the decision was that the length of time was held to be unreasonable even though the Town had made documented progress toward a permanent set of regulations. The Town showed that it had adopted a master plan in 1980 and had completed the preliminary draft of a zoning ordinance in 1983.

In the 1991 case, *Duke v. Town of Huntington*,¹⁷ the Town had been developing a planning document, a Local Waterfront Revitalization Plan (LWRP), for many years when it enacted a moratorium prohibiting the construction of docks. Although it was originally to have expired within ten months, the moratorium was extended twice, to cover a total period of almost three years, triggering a court challenge. While recognizing the general usefulness of moratoria, the court nonetheless invalidated the Town's temporary restriction. The court took this action because the Town's long delay in developing a permanent LWRP, combined with a lack of real progress, made the delay occasioned by the moratorium on the shore owner's right to build a dock excessive and unconstitutionally void.

In *Mitchell v. Kemp*,¹⁸ the Appellate Division, Second Department, upheld the finding of the Supreme Court, Dutchess County, that the Town of Pine Plains's five-year moratorium exceeded a reasonable period of time for enacting a comprehensive, new zoning regulation.

In *Ecogen, LLC v. Town of Italy*,¹⁹ the court upheld

the Town's moratorium on wind energy projects. The moratorium had been in effect for over two years, but in view of the specific technical nature of the use involved, the court agreed to allow the Town an additional 90 days to either enact a comprehensive zoning plan or render a decision on the project sponsor's variance application.

What constitutes a reasonable duration for a moratorium, even where the municipality is fulfilling its duty to be working on a new plan or permanent legislation to address the issue at hand? Moratoria of six months, as well as of one year, have been upheld by the courts. It is unclear whether a moratorium lasting longer than a year would be considered reasonable, but that may depend, to an extent, on the subject matter addressed by the moratorium.

2) Valid Public Purpose.

The enactment of moratoria, like all exercises of the

| The moratorium must be enacted for a permissible purpose: to study |
|---|
| and/or adopt a |
| new plan or new |
| regulations. |
| |

police power, must be justified by a valid public purpose. A moratorium on land uses or development will be considered a valid interim measure if it is reasonably designed to temporarily halt development while the municipality considers comprehensive zoning

changes and the enactment of measures to specifically address the matters of community concern.

The purpose section of the local law or ordinance should state what the municipality hopes to accomplish during the moratoria. For example,

To develop or amend:

- A Comprehensive Plan
- Zoning Regulations

- Subdivision Regulations
- Site Plan Regulations
- Other Land Use Regulations

Or, to make improvements to:

- Road System
- Water or Sewer Infrastructure

The decision in *Lake Illyria Corporation v. Town* of Gardiner²⁰ has frequently been cited for the proposition that a community must be actively engaged, among other things, in the revision of its comprehensive plan during a land use moratorium. A comprehensive plan addresses issues of growth and development on a community-wide basis. In the *Lake Illyria* case, the Third Department pointed out:

> " The purpose of 'stop-gap' zoning is to allow a local legislative body, pending decision upon the adoption of a comprehensive zoning ordinance, to take reasonable measures temporarily to protect the public interest and welfare until an ordinance is finally adopted. Otherwise, the eventual comprehensive zoning ordinance might be of little avail."

In Oakwood Island Yacht Club v. City of New Rochelle, the City of New Rochelle adopted a six month moratorium on building permits to halt development on an island within the city limits. The city halted the development because it had applied for a State grant to purchase the island. Petitioners, who had received site plan approval, applied for but were denied a building permit because the six month moratorium was in effect. The supreme court, in a decision affirmed by the Court of Appeals, held that the moratorium unconstitutionally deprived the owner of the property due process of law. Although the court recognized that a municipality may lawfully enact "stop-gap" legislation pending a revised comprehensive plan, the city's desire to acquire

the property was not a valid public purpose for a moratorium. The court said: "There is neither case authority nor statutory authority for adopting an ordinance to prevent a property owner from building upon his property because the municipality in the future may seek to obtain it by condemnation."²¹

In order to update their comprehensive plans to address the subject of cellular telephone facilities, some communities enacted moratoria on the processing of cellular applications pending completion of the planning process and the enactment of new regulations pertaining to towers. The public purpose for enacting moratoria on cellular facilities was important to courts in deciding cases on their validity. In the case of Cellular Telephone v. Town of Harrison,²² a 90-day moratorium on review or approval of cellular telephone antennae facilities was upheld as a reasonable measure designed to give the town a short period to enact zoning changes to address the increasing number of cellular telephone antenna applications. By contrast, the Appellate Division in *Cellular Telephone v. Village of Tarrytown*,²³ invalidated a moratorium on cellular telephone towers because it was not adopted for a proper and reasonable purpose. The court found that local officials were motivated by public opposition and the unsubstantiated fears of health risks from telecommunications signals, rather than a land use planning purpose.

3) Balancing benefits and detriments of the moratorium to the municipality.

The advantages to the municipality must outweigh the potential hardships to landowners. The municipality should be prepared to show that the burden imposed by a moratorium is being shared substantially by the public at large, as opposed to being visited upon a minority of landowners. This principle was explained by the Court of Appeals in *Charles v. Diamond*,²⁴ a case that dealt with restrictions on residential sewer connections. The court recognized that, in judging a moratorium on development, "the crucial factor and perhaps even the decisive one is whether the ultimate economic cost of the benefit is being shared by the members of the community at large, or rather, is being hidden from the public by the placement of the entire burden upon particular property owners".

In the *Charles* case, the Court concluded that "only where the municipality has acted, or refused to act, and the social cost of a benefit has been placed entirely upon particular landowners rather than spread throughout the jurisdiction, does it become necessary to review discretion and set aside unconstitutional confiscation . . . no single factor, by itself controls the determination of whether a particular municipal action is reasonable."

4) Strict adherence to procedures for the enactment of local laws and ordinances.

Whether enacted as local laws or ordinances, moratoria must strictly adhere with the procedural requirements of the Municipal Home Rule Law²⁵ or the rules for adoption or amendment of zoning in the State zoning enabling acts. These rules are found in Town Law sections 264 and 265, Village Law section 7-706 and 7-708, and in individual city charters. When enacting moratoria, municipalities should follow the procedures for enactment including newspaper notice, public posting, county referral, public hearing and filing after adoption of a local law.

Moratoria on zoning approvals are subject to referral to the county planning agency under General Municipal Law section 239-m. In the case of *B* & *L* Development v. Town of Greenfield²⁶, the court invalidated a one-year moratorium on the issuance of building permits and construction approvals because the town did not follow the procedural requirements for amending zoning. The court held that the moratorium law was subject to all of the statutory procedural requisites of zoning laws, including county referral pursuant to General Municipal Law section 239-m and notification of adjacent municipalities pursuant to Town Law section 264.

In the 1997 case of *Caruso v. Town of Oyster Bay*,²⁷ the court held that the town board had no

jurisdiction to adopt a local law establishing a moratorium on the issuance of building permits for new home construction in a defined area of the town. The Town had failed to properly refer the law first to

Where the moratorium acts as an amendment to zoning, it must be referred to the county planning agency under General Municipal Law section 239-m.

the county planning commission, as required by General Municipal Law section 239-m.

In *Temkin v. Karagheuzoff*,²⁸ the Appellate Division invalidated a "stop-gap" zoning amendment that effectively imposed a moratorium on the issuance of building permits for new nursing homes. Although the moratorium was enacted to maintain the status quo in case the zoning regulations were changed, the court held that the Board of Estimate could not enact even a short-term interim zoning resolution without complying with the NYC Charter, which required the recommendation of the City Planning Commission. The amendment was struck down because the court found that the City of New York failed to follow proper procedures in enacting the stop-gap zoning. The Court of Appeals affirmed,²⁹ stating that "there is no question here of the right of a government to adopt interim or stopgap zoning. The only contention is that when such resolutions are adopted, they must be adopted in accordance with the law."³⁰

Not all moratoria on land use approvals can be categorized as zoning. Where non-zoning moratoria

are adopted by local law, the procedures of Municipal Home Rule Law sections 20 through 27 must be followed.³¹

One example is the moratorium on the processing or approval of subdivision plats by planning boards. Of particular concern is that the State subdivision statutes provide for default approval of a subdivision if the planning board fails to meet certain time frames. A moratorium which suspends action on subdivision applications may delay action beyond the time frames. Therefore, it is has become common practice for municipalities to adopt the moratorium by a local law which supersedes and suspends the applicable default approval provisions in Town Law or Village Law.

In 1987, the Court of Appeals dealt with a moratorium on subdivision approvals in the landmark case of Turnpike Woods, Inc., v. Town of Stony Point.³² The town had adopted a local law temporarily suspending the authority of the town planning board to approve subdivision plat applications. Following refusal by the planning board to consider his application, a developer sued for a default approval. Under Town Law section 276 default approvals may be secured by the developer if the planning board fails to make a decision on a subdivision application within the time period required by the statute. The developer claimed the town had not followed proper local law adoption procedures under the Municipal Home Rule Law in attempting to supersede that default approval provision. The Court of Appeals agreed with the developer and struck down the moratorium law.

Moratoria are "Type II Actions" under the State Environmental Quality Review Act (SEQRA) regulations, which means that SEQRA does not apply to the enactment of moratoria (6 NYCRR section617.5(c)(30)). The proposed adoption of a The State Environmental Quality Review Act (SEQRA) does not apply to moratoria. moratorium does not require a determination of significance or the preparation of any other SEQRA documents.

5) Time certain for expiration of

moratorium. The courts have required a time certain for the expiration of a moratorium. In *Russo* v. *New York Stale Department of Environmental Conservation*,³³ it was held that where there was a moratorium on the alteration of wetlands for over three years and no indication as to when it would end, *the court could inquire as to the constitutionality of the moratorium;* the court said that the duration cannot be unreasonable and ordered DEC to set a date certain for the termination of the moratorium on the alteration of wetlands.

VARIANCES FROM THE MORATORIUM

In addition to the procedural rules for *enacting* a moratorium, the courts have addressed the question of the procedure to be followed *during* a moratorium.

A moratorium law often contains a mechanism that allows landowners to apply for relief from the moratorium. If the moratorium affects zoning, appeals from the moratorium are taken to the zoning board of appeals using the statutory standards for granting use or area variances. In the case *Held v. Giuliano*,³⁴ the Appellate Division, held that applications for variances from an interim zoning ordinance must meet the same statutory standards for variances as though the interim zoning was permanent.³⁵

It is quite common in moratorium laws that variances from the strict terms of the moratorium are granted by the *governing board* rather than by the zoning board of appeals. If the governing board will be considering variances in moratoria related to zoning instead of a board of appeals, the moratoria must supersede State statutes pertaining to the variance authority of boards of appeals. The drafters of land use moratoria should bear in mind that this procedure will require proper use of the supersedure power, as the enabling laws provide that only the board of appeals may grant variances.

THE "TAKINGS" ISSUE

As we have seen, the courts have established strict rules, both as to the procedural as well as to the substantive requisites of moratoria. The substantive rules might be said to embody a particular adaptation of the general principle that any enactment affecting private property rights must "bear a substantial relation to the public health, safety, morals, or general welfare."³⁶ If, however, a land use regulation operates to deprive the owner of all beneficial economic use of the property, may that owner be entitled to monetary compensation under the Fifth and Fourteenth Amendments to the U.S. Constitution?

Early cases recognized the principle of *inverse* condemnation (i.e., a regulatory taking).³⁷ Until 1987, however, the courts had not considered *temporary* land use controls (such as moratoria) to amount to a deprivation of all beneficial use in the property. In cases where a regulation went "too far," and impacted an owner unfairly, the remedy was to strike down the local enactment and allow the owner to build.³⁸ In 1987, the United States Supreme Court changed that rule with its decision in First English Evangelical Lutheran Church of Glendale v. County of Los Angeles.³⁹ First English involved a challenge, brought against a county's moratorium on the construction or reconstruction of buildings within an "interim flood protection area." The moratorium effectively made it impossible for the church to rebuild a campground that had been previously destroyed by a flood.

In *First English*, the U.S. Supreme Court held for the first time that temporary takings that deny a landowner all use of his/her property are not different in kind from permanent takings. Once a court determines that a taking has occurred, it must award damages for the period of time the restrictive regulation was in effect.

Whether a moratorium is a compensable taking, as it relates to specific property, depends on the facts of each case. Significantly, the Supreme Court left it to the trial level courts to determine in each case whether a temporary taking has actually occurred, i.e., whether the regulation denied the owner all use of his/her

property. The latter principle was further clarified by the Court in its 1992 decision in *Lucas v. South Carolina Coastal Council*,⁴⁰ where it held that a taking could only occur in "the extraordinary circumstance when *no* productive or economically beneficial use of land is permitted."

Could land use moratoria amount to compensable takings of property according to the rules established in *First English* and *Lucas*? Theoretically, yes, but, in practice, such determinations will rest on the facts of each case.

In its 2002 decision in *Tahoe-Sierra Preservation Council, Inc. v. Tahoe Regional Planning Agency,*⁴¹ the Supreme Court firmly rejected the argument that a temporary moratorium on development, enacted for reasonable purposes, necessarily constitutes a deprivation of the owner's beneficial use of his or her property. In *Tahoe-Sierra*, an interstate regional planning agency had adopted moratoria on all construction in certain areas surrounding Lake Tahoe, pending the adoption of a permanent land use plan and revised development restrictions designed to protect the water quality of the lake. In ruling against the claims of landowners, the Court held that one cannot separate out a finite stretch of time in the life of a parcel and compensate the owner simply because the owner is deprived of the property's beneficial use during that stretch of time alone. Instead, the analysis must be the same as that which is applied in all regulatory takings arguments: the courts must weigh all the relevant factors affecting the "parcel as a whole." In *Tahoe-Sierra*, the Supreme Court held that a moratorium, like most other land use regulations, is subject to an inquiry that considers the circumstances of each case. Moratoria are not, therefore, *categorically* takings. Indeed, many parcels will emerge from a moratorium with *enhanced* value, owing to the better land use regulations then in place.

In evaluating whether a land use regulation takes all economic value of property, the language used by the Court of Appeals in *Golden* is worth noting: "The fact that the ordinance limits the use of, and may depreciate the value of the property will not render it unconstitutional . . . unless it can be shown that the measure is either unreasonable in terms of necessity or the diminution in value is such as to be tantamount to a confiscation . . . "

The New York courts appear to have applied a case-specific balancing analysis even prior to *Tahoe-Sierra*. Since the *First English* case was decided, at least one community's moratorium has been upheld against a takings claim. Quoting language from earlier cases, the Appellate Division, Second Department, stated that a moratorium adopted by the Village of Irvington constituted "a reasonable measure designed to temporarily halt development while the [Village] considered comprehensive zoning changes and was therefore a valid stopgap or interim measure."⁴² The moratorium was held not to effectuate an unconstitutional taking of private property.

However, in *Seawall Associates v. City of New York*,⁴³ the Court of Appeals *did* hold a moratorium to be an unjust taking. The City of New York had adopted a local law placing a fiveyear moratorium on conversion, alteration or demolition of single-room-occupancy units in multiple dwellings. The law also required the owners to restore such units to habitable conditions and to lease them at controlled rents for an indefinite period. The Court of Appeals held that the law effectuated an unconstitutional taking under the Fifth and Fourteenth Amendments. The Court viewed the NYC law as locking the owners of "SRO's" into maintenance of a use that did not allow them any ability to realize an economic return on their investment.

If a landowner feels that a moratorium law as applied constitutes a taking, the landowner must first exhaust all available administrative procedures before bringing a lawsuit. In the 1990 case of Hawes v. State,44 the State Legislature had enacted a moratorium on development along Beaverdam Creek in the Town of Brookhaven, to allow the Department of Environmental Conservation time to study the creek for possible inclusion in the State's Wild, Scenic and Recreational Rivers System. A landowner filed an action claiming the moratorium effectuated an unjust taking. The Appellate Division, Second Department, dismissed the case, stating that it was possible for the owner to have applied to DEC for a permit first, before going to court. The permit, if granted, could have exempted the parcel from the moratorium on the basis that the proposed development would not be contrary to the policy of the Wild, Scenic and Recreational Rivers Act. Since the owner had not so applied, the taking claim could not be heard.

VESTED RIGHTS

Landowners who are aware that a moratorium is under consideration may act promptly to acquire "vested rights" in a use before the moratorium takes effect. Under ordinary circumstances, a moratorium enacted in good faith and according to proper procedures is viewed much the same as any zoning amendment: a property is bound by the moratorium the day it takes effect, unless the property owner has acquired a "vested right" to build or use the property beforehand.⁴⁵ A moratorium may not be used to stop building operations begun under a valid building permit and which continued in good faith when the property owner had secured vested rights.

Under what circumstances, then, might an owner be able to claim a right to build or to use the property according to the law as it existed prior to the effective date of a moratorium? The Court of Appeals has established a rule regarding vested rights that applies to land use regulations in general. The rule was first articulated in *People v*. *Miller*,⁴⁶ and has most definitively been restated by the Court in *Ellington Construction Corp. v*. *Zoning Board of Appeals of the Incorporated Village of New Hempstead*,⁴⁷ to wit:

> "where a more restrictive zoning ordinance [ie- a moratorium] is enacted, an owner will be permitted to complete a structure or a development which an amendment has rendered nonconforming only where the owner has undertaken **substantial construction** and made **substantial expenditures** prior to the effective date of the amendment."

The application of this "substantial construction, substantial expenditures" test will, of course yield results particular to each set of facts. In two cases in particular, the lower courts declined to find vested rights. In *Pete Drown, Inc. v. Town Board of the Town of Ellenburg*,⁴⁸ the Town, which had no zoning regulations, passed a local law establishing a moratorium on the construction of new commercial buildings. About a year later the moratorium was replaced by a comprehensive zoning law that prohibited the incineration of commercial or hazardous waste. During the moratorium a landowner had spent more than \$850,000 on a project to site a commercial waste incinerator, including purchase and storage of the

incinerator itself, pending the lifting of the moratorium and approval of the project. In a lawsuit, the owner claimed to have acquired vested rights to operate the incinerator. The Appellate Division disagreed and held that there had been no substantial construction or change to the land itself and that there was no showing that the owner could not recoup its expenditures in the marketplace-presumably by selling the stored incinerator. While the absence of substantial construction in and of itself would have been sufficient to defeat the owner's claim of vested rights, the court also held that the owner's expenditures, recoverable as they were, did not constitute the "serious loss" required by the courts in prior cases.

In *Steam Heat, Inc. v. Silva*,⁴⁹ the Appellate Division, Second Department, upheld the New York City Board of Standards and Appeals's determination that a landowner had not accomplished substantial completion of his building before a moratorium went into effect, even though there was evidence that he had made some expenditures. The Court sustained the finding that the construction which occurred was of the "most basic and impermanent nature with rudimentary detailing and flimsy and inexpensive materials" and therefore insubstantial.

DRAFTING A MORATORIUM LAW

By now, there is sufficient case law on the subject of moratoria to furnish guidance to those community officials desiring to draft one. The following precepts should be followed:

(a) Adopt the moratorium in the form of a *local law*, the simplest and strongest form of municipal enactment, even if the existing zoning regulations are in the form of an ordinance. Although it is possible to amend an existing ordinance via a new ordinance in cities and towns, the use of a local law will avoid any uncertainty surrounding basic legal authority.

(b) In a municipality with an existing zoning ordinance or local law, the moratorium should be treated as an amendment to that ordinance or local law. The applicable procedural requirements--e.g., notice, hearing and possible county referral--must be strictly followed.

(c) The moratorium should clearly define the activity affected, and the manner in which it is affected. Does the moratorium affect construction itself? Does it affect the issuance of permits? (The permitting official will want to know this.) Does it affect actions by boards or commissions within the municipality? May project review continue, or must it, too, be stopped?

(d) If the moratorium supersedes any provision of either the Town Law or the Village Law, then the moratorium must be adopted by local law, using Municipal Home Rule Law procedures. It must also state, with specificity, the section of the Town or Village Law being superseded. In particular, where the moratorium suspends subdivision approvals, it must be made clear in the moratorium law that the "default approval" provisions of the subdivision statutes of the Town or Village Law (as the case may be) are superseded.

(e) Establish a valid public purpose for the moratorium with a preamble that recites the nature of the particular land use issue, as well as the need for further development of the issue in the community's comprehensive plan and/or in its current land use regulations. Refer to the fact that time is needed for community officials to comprehensively address the issue without having to allow further development during that time. Such a statement will help make it clear that the benefits to the community outweigh the potential burden to the landowners.

(f) Be sure the moratorium states that it is to be in effect for a defined period of time. The moratorium should be for a time no longer than absolutely necessary for the municipality to place permanent regulations in effect.

(g) The moratorium should include a mechanism allowing affected landowners to apply to a local board for relief from its restrictions, or it should contain a clear reference to the fact that an owner may make use of the existing variance procedures under the current zoning regulations. If a board other than a zoning board of appeals will execute this authority, the moratorium should enacted using the supersession authority (see "(d)" above).

CONCLUSION

As communities continue to grow, the pressures for further development may well increase. Ideally, a community's comprehensive plan and its land use regulations will be adequate to deal with those pressures. But the ideal is rarely the fact. Such pressures may lead to calls for a halt to particular types of development, or to development in particular areas, until municipal leaders have had a reasonable opportunity to formulate a comprehensive regulatory approach. Moratoria will, therefore, continue to be adopted. It is hoped that this publication, along with others in such areas as comprehensive planning, zoning and subdivision control, will serve as a useful guide to those community officials involved in the process.

ENDNOTES

1. Charles v. Diamond, 41 N.Y.2d 318, 324 (1977).

2. See People ex rel. St. Albans-Springfield Corp. v. Connell, 257 N.Y. 73 (1931); Arverne Bay Construction Co. v. Thatcher, 278 N.Y. 222 (1938).

3. 58 F.2d 784 (D.C. Va., 1932).

4. 52 Misc.2d 815 (Sup. Ct., Oneida Co., 1966). The validity of this type of moratoria had been upheld by the Courts even earlier. In sustaining a 60 day moratorium in *Hasco Electric Corp. v. Dassler*, 143 N.Y.S.2d 240 (Sup. Ct., West. Co., 1955), the Supreme Court stated that it "was inclined to the opinion that the local legislative body was vested with the authority to enact reasonable stop-gap or interim legislation prohibiting the commencement of construction for a reasonable time during consideration of proposed zoning changes."

5. 35 N.Y.2d 507 (1974).

6. 35 N.Y.2d at 512.

7. "Mere financial loss is not enough, but the restriction on use must be so great as to deprive the owner of any reasonable use of the property to which any owner would be generally entitled to put the property." *Charles v. Diamond* 41 N.Y.2d 318, 326 (1977).

8. 41 N.Y.2d 318 (1977).

9. 41 N.Y.2d at 323-324 (citations omitted).

10. 23 N.Y. 2d 424 (1969).

11. 30 N.Y.2d 359 (1972).

12. See Albany Area Builders Association v. Town of Clifton Park, 172 A.D.2d 54 (3rd Dept., 1991).

13. *Tahoe-Sierra Preservation Council, Inc. v. Tahoe Regional Planning Agency*, 535 U.S. 302, 341-342 (2002): "It may well be true that any moratorium that lasts for more than one year should be viewed with special skepticism. But given the fact that the District Court found that the 32 months required by [Tahoe Regional Planning Agency] to formulate the 1984 Regional Plan was not unreasonable, we could not possibly conclude that every delay of over one year is constitutionally unacceptable."

14. 43 A.D.2d 386 (3rd Dept., 1974).

15. 43 A.D.2d at 388.

16. 108 A.D.2d 914 (2nd Dept., 1985).

- 17. 153 Misc.2d 521 (Sup. Ct., Suffolk Co., 1991).
- 18. 176 A.D. 2d 859 (2nd Dept., 1991).
- 19. 438 F. Supp.2d 149 (W.D.N.Y., 2006).
- 20. 43 A.D.2d 386 (3rd Dept., 1974).

21. See Oakwood Island Yacht Club, Inc. v. City of New Rochelle, 59 Misc.2d 355 (Sup. Ct., Westch. Co., 1969), affirmed 36 A.D.2d 796 (2nd Dept. 1971), affirmed 29 N.Y.2d 704 (1971).

- 22. 11/30/95 N.Y.L.J. p. 35 col. 3 (Sup. Ct. Westchester Co.)
- 23. 209 A.D.2d 57 (2nd Dept. 1995).
- 24. 41 N.Y.2d 318 (1977).
- 25. Municipal Home Rule Law section 10 and sections 20 -27.
- 26. 146 Misc.2d 638 (Sup. Ct., Saratoga Co., 1990).
- 27. 172 Misc.2d 93 (Sup. Ct., Nassau Co., 1997).
- 28. 43 A.D.2d 820 (1st Dept. 1974) affd 34 N.Y.2d 324 (1974).
- 29. 34 N.Y.2d 324 (1974).
- 30. 34 N.Y.2d at 328.
- 31. See Pete Drown, Inc. v. Tn. Bd. of the Tn. of Ellenburg, 229 A.D.2d 877 (3rd Dept., 1996).
- 32. 70 N.Y.2d 735 (1987).
- 33. 55 A.D.2d 935 (2nd Dept. 1977)
- 34. 46 A.D.2d 558 (3rd Dept., 1975).

35. Those standards are now set forth in the State enabling statutes, General City Law section 81-b, Town Law section 267-b, Village Law section 7-712-b. The courts will apply them in the same manner as for variances in general. See *Montgomery Group*, *LLC v. Town of Montgomery*, 4 A.D.3d 458 (2nd Dept., 2004).

36. See Nectow v. City of Cambridge, 277 U.S. 183 (1928).

37. See Pennsylvania Coal Co. v. Mahon, 260 U.S. 393 (1922).

38. See *Agins v. Tiburon*, 24 Cal.3d 266 (Sup. Ct. of Calif., 1979), aff'd on oth. grds., 447 U.S. 255 (1980).

39. 482 U.S. 304 (1987).

40. 505 U.S. 1003 (1992).

41. 535 U.S. 302 (2002).

42. See 119 Development Associates v. The Village of Irvington, 171 A.D.2d 656 (2nd Dept., 1991).

43. 74 N.Y.2d 92 (1989), cert. den., 493 U.S. 976 (1989).

44. 161 A.D.2d 745 (2nd Dept., 1990); see also, *Timber Ridge Homes at Brookhaven, Inc., v. State*, 223 A.D.2d 635 (2nd Dept., 1996).

45. See *Matter of West Lane Properties v. Lombardi*, 139 A.D.2d 748 (2nd Dept., 1988); *Home Depot, U.S.A., Inc. v. Village of Rockville Centre*, 295 A.D.2d 426 (2nd Dept., 2002).

46. 304 N.Y. 105 (1952).

47. 77 N.Y.2d 114, 122 (1990) (emphasis added). See also *Masi Management, Inc. v. Town of Ogden*, 180 Misc.2d 881 (Sup. Ct., Monroe Co., 1999).

48. *Supra*, note 9.

49. 230 A.D.2d 800 (2nd Dept., 1996).

FIRE HEADQUARTERS ROUTE 139 LINCOLNDALE, NEW YORK

ERIC ZOHAR, CHAIRMAN

JOHN FITZGERALD

STEPHANIE PORTEUS

JOHN CHRYSOGELOS

BOARD OF FIRE COMMISSIONERS TOWN OF SOMERS SOMERS FIRE DISTRICT

P.O. BOX 300 SOMERS, NEW YORK 10589

RECEIVED

APR 18 2024 RALPH STUPPLE FIRE DISTRICT MANAGER OFFICE OF THE SUPERVISOR CLASSE KELAUPERVISOR SECRETARY

JOANNE VALENTINE TREASURER

April 15, 2024

Via Mail and E-Mail to rtrombetta@ci.carmel.ny.us

Town of Carmel Planning Board Members 60 McAlpin Avenue Mahopac, NY 10541

> Re: Proposed Lithium Battery Storage Facility Located off Miller Road, Mahopac and adjoining the Town of Somers

Dear Chairman Paeper and Members of the Carmel Planning Board,

On behalf of the Somers Fire District Board of Fire Commissioners, I am writing to share our grave trepidations regarding the Lithium Battery Storage Facility proposal (hereinafter the "Project") which will come before your Board for deliberation. While the approval of the Project does not fall within the purview of the Town of Somers, our Fire District borders the Town of Carmel and, due to mutual aid agreements among our fire departments, we have numerous concerns regarding adequate training of firefighters, who are unequipped and unprepared with respect to fighting battery storage facility fires, the cost of adequate equipment and gear, and the amount of manpower that would be required in case of a battery storage emergency like those seen in Warwick, East Hampton and Lyme, New York, along with numerous other lithium battery fires around the country. As you might recall, residents within a one-mile radius of the Lyme fire were directed to shelter in place for several hours due to the amount of smoke in the air, and the Warwick fire caused heavy smoke and burning plastics, prompting the evacuation of the district office and all local schools.

Critically, days after the fires were out, officials said the area was too hot for anyone to enter to investigate the cause, and firefighters and public safety personnel were forced to remain on scene to observe the facilities in case of an outbreak of new fires. Therein lies just one of the critical issues of concern. As you know, both Carmel and Somers, along with numerous nearby fire departments are all volunteer agencies. Most of the volunteers have full time work, families and numerous additional obligations. Thus, there is, and should be, great concern regarding the availability of volunteers to stand by for days or weeks, ensuring that any new outbreak will be swiftly handled. While East Point Energy has apparently stated that the Project will not be approved until the Fire Department has signed off on it, there needs to be clarification as to which Fire Department(s) they are referring. In our opinion, each and every Fire Department that is part of the mutual aid plan which would be expected to provide emergency assistance in case of a battery storage fire, **must be considered, heard and sign off on this Project before it is approved.**

Finally, we urge that the Planning Board take a different stance than that of the Town Board which vigorously and, quite frankly, **discourteously refused** to take comment from anyone with respect to the proposed Project, despite the Town of Carmel's absolute reliance on its own as well as neighboring fire departments to provide emergency assistance in case of a battery storage fire, and **allow and encourage** that **ALL** residents of **ALL** communities be permitted to speak and be heard during the Planning Board review process. After all, not only do many of these residents live within 200 feet of the proposed Project, but they are also the residents who the Town expects and relies upon to step up to help and/or be impacted by the proposed Project.

In sum, for the reasons stated above, the Somers Board of Fire Commissioners joins with the Somers Town Board in urging transparency, careful consideration and **Full public participation** during the review process. Until that time, the Somers Board of Fire Commissioners vehemently opposes the proposed Project.

Respectfully,

2

Ariye Zohar Chairman, Somers FD BOFC

Mike Lawler, NYS Congressman cc: Pete Harckham, NYS Senator Matt Slater, NYS Assemblyman George Latimer, Westchester County Executive Kevin Byrne, Putnam County Executive Vedat Gashi, Westchester County Legislator Michael Cazzari, Carmel Town Supervisor Robert Scorrano, Somers Town Supervisor Somers Town Board Somers Volunteer Fire Department Mahopac Volunteer Fire Department Mahopac Falls Volunteer Fire Department Carmel Fire Department Avangrid, Inc. & NYSEG, its subsidiary The Somers Record (Halston Media News)

NEW YORK STATE INTER AGENCY FIRE SAFETY WORKING GROUP

FIRE CODE RECOMMENDATIONS



BACKGROUND AND SCOPE

Following a series of fires at three battery energy storage system (BESS) locations across New York State in 2023, Governor Hochul convened an inter-agency Fire Safety Working Group (WG) to address safety concerns around lithium-ion BESS.

The WG consists of state agency officials from:

- Division of Homeland Security and Emergency Services
- Office of Fire Prevention and Control,
- New York State Energy Research and Development Authority (NYSERDA),
- New York State Department of Environmental Conservation,
- Department of Public Service, and the
- Department of State and nation-leading BESS safety industry experts, such as national labs and highly specialized professional energy storage consultants.

The WG was formed with the following objectives:

- Investigating the recent fires
- Inspecting current installations
- Identifying gaps in codes and industry best practices
- Developing recommendations for the New York State Fire Prevention and Building Code Council (Code Council) for revisions and enhancements to the Fire Code of New York State (FCNYS or Fire Code).

New York State Fire Prevention and Building Code Council (Code Council)

The Code Council is the entity responsible for adopting The New York State Uniform Fire Prevention and Building Code (Uniform Code), which is adapted from the International Codes (I-Codes) produced by the International Code Council (ICC). The Code Council is comprised of 17 members appointed by the Governor and has members representing architects, engineers, builders, trade unions, persons with disabilities, code enforcement, fire prevention, varying levels of government, the State Fire Administrator, and the Secretary of State.

The Uniform Code prescribes the minimum standards for construction in New York and includes, among other code books, the FCNYS. It is applicable in every part of the state except for New York City, which is currently permitted to retain its own code.¹ Further, the Uniform Code applies in all jurisdictions without the need for local adoption. The draft recommendations in this memo are intended for the Code Council's consideration as part of the pending Uniform Code update. Interested stakeholders are encouraged to submit comments on the proposed recommendations to the Working Group for incorporation into the final version of this document, which will be submitted to the Code Council.

¹ See Executive Law §383, New York State Senate website <u>https://www.nysenate.gov/legislation/laws/EXC/383</u>

New York State BESS Safety Efforts

Only a few years ago, codes and standards governing lithium-ion BESS safety were in their adolescent stage and contained only limited requirements for these systems. In July 2019, following several BESS failures across the globe, New York State was the first state to adopt language from the draft 2021 International Fire Code (IFC) Section 1207 Electrical Energy Storage Systems, which provided more detailed regulations for lithium-ion batteries than the previous editions of the Fire Code.² These 2019 amendments were then integrated into the current 2020 FCNYS Section 1206, incorporating changes made to the draft IFC before its official release.

New York State has also actively engaged with local Authorities Having Jurisdiction (AHJ) and fire departments to provide training and education on BESS and recent code updates and plans to continue efforts to support the safe installation of BESS across the state. This will include clarifying requirements through code language and providing avenues for local jurisdictions to seek independent third-party plan reviews by organizations deeply familiar with BESS safety and code compliance.

Scope

This document is intended to provide an overview of potential ways to improve the Fire Code based on WG discussions and Fire Code review, and to provide a list of recommendations for consideration for future code installments and other state requirements to address safety concerns. These findings and recommendations will be shared with other organizations including, but not limited to the New York City Fire Department (FDNY), National Fire Protection Association (NFPA), International Code Council (ICC), and Underwriters Laboratories (UL), in addition to being released for public comment.

The recommendations outlined in this memo are intended to apply solely to lithium-ion BESS exceeding the 600 kilowatt-hour (kWh) Maximum Allowable Quantity (MAQ) threshold, as established per the <u>2020 FCNYS</u> Table 1206.12. Further, the recommendations were developed with a focus on outdoor, dedicated use buildings, and other grid-scale BESS systems. As such, some of these requirements may be inappropriate or unnecessary for indoor energy storage systems.

The WG recommendations comprise three categories:

- 1. **Proposed Recommendations for Fire Code Updates**–These recommendations pertain to existing sections of the FCNYS where potential improvements have been identified in the years since the code went into effect. These recommendations propose updates to bring the regulations in line with recent developments in the BESS industry.
- 2. Proposed Recommendations for Fire Code Additions–These recommendations draw from other standards and regulations that apply to BESS that should be considered for inclusion as new sections in the FCNYS. Additionally, leaders in the BESS fire safety sector in New York and nationally have leveraged their experience, knowledge, and expertise to recommend new standards for inclusion in the FCNYS that have not yet been officially adopted in any existing BESS codes, standards, and regulations.
- 3. Additional Considerations–Some of the issues identified in the WG did not fall into either of the previous categories. These considerations may not be appropriate for incorporation into the FCNYS, but they could help to address potential issues with BESS fire safety through other regulatory mechanisms.

² See Notice of Emergency Adoption and Proposed Rule Making in the July 17, 2019 State Register, Notice of Emergency Adoption in the October 17, 2019 State Register, and Notice of Adoption in the October 17, 2019 State Register.

These proposed recommendations could lead to better coordination with and training for local AHJs and emergency responders in the planning phase of projects, enhanced review of project design and emergency response plans, inclusion of critical safety features in the design and construction of the site, and ongoing emergency preparedness. As the BESS industry evolves, the consideration and potential inclusion of these proposed recommendations into the FCNYS will advance the safe and reliable growth of BESS capacity that is critical to the clean energy transition.

Proposed Recommendations for Fire Code Updates

The WG conducted a thorough analysis of the existing fire code in addition to recently updated model codes and standards and prepared recommendations, which are organized by the relevant section of the existing FCNYS, for the next code cycle update of the FCNYS. This section provides a summary of identified potential improvements to the current *2020 Fire Code of New York State Section 1206 Electrical Energy Storage Systems*. Where available, sections from corresponding sections of *2023 NFPA 855*, the proposed *2024 International Fire Code Section 1207*, or other codes and standards are provided for reference. Though the 2024 IFC references the 2021 NFPA 855, the WG recommends that the Code Council reference 2023 NFPA 855 in the next edition of FCNYS.

1. FCNYS 1206.8 PEER REVIEW

Require industry-funded independent peer reviews for all projects.

Local AHJs often lack the resources or expertise to understand and interpret critical BESS permitting documents, particularly the UL 9540A report, which contains product-level test data on which to base important siting decisions and requirements. This gap in AHJ expertise has led to incomplete or inadequate applications in which the requirements of FCNYS 1206 are not sufficiently met.

"Peer reviews" by experts in the field can assist local AHJs in their review and understanding of BESS permit applications and their compliance with existing Fire Code requirements. Currently, FCNYS 1206.8 Peer Review empowers local AHJs to require that BESS developers pay for an independent peer review of the developer's permit application. However, despite the benefits, peer reviews are rarely utilized.

As such, the WG recommends that peer reviews be required for all BESS installations exceeding energy capacity thresholds per FCNYS Table 1206.1 to ensure proper compliance and oversight for upcoming projects.

When identifying potential candidates qualified to conduct peer reviews, the use of third-party entities or insurers should be considered in order to provide a level of independence and transparency. Further, NYSERDA or another qualified entity could issue a rolling Request for Qualifications solicitation for firms qualified to conduct BESS peer reviews to establish a list of peer reviewers that BESS project developers can utilize.

The WG notes that a corollary section from Chapter 1 of the 2021 IFC (104.8.2 Technical Assistance) was not adopted into 2020 FCNYS, presumably addressed by the inclusion of 1206.8 Peer Review. The 2024 IFC does not currently contain language for Peer Review in Chapter 12.. The WG strongly recommends that the provision for peer review be left in Chapter 12 of the Fire Code and be mandatory for all BESS projects.

2. FCNYS 1206.13.3 EXPLOSION CONTROL

Expand the requirement for explosion control to include BESS cabinets in addition to rooms, areas, and walk-in units. Additionally, provide design requirements or language for what constitutes a "passable" system.

A primary concern associated with lithium-ion BESS is the potential for explosion or deflagration due to accumulation of flammable off-gases within a confined space, such as a battery enclosure. Currently, FCNYS 1206.13.3 requires that explosion control be provided for lithium-ion BESS in rooms, areas, or walk-in energy storage units, and is therefore not required for non-enterable BESS units, also referred to as "cabinets". As such, the WG recommends that the requirement for explosion control is expanded to include BESS cabinets in addition to rooms, areas, and walk-in units.

The current code also does not include design requirements for what constitutes a "passable" explosion control system, which should be established in the next installment of the FCNYS. Currently, *NFPA 855*, and *FDNY 3 RCNY 608-01* require that an explosion control system be provided in accordance with one of the following:

- Explosion prevention in accordance with NFPA 69 Standard on Explosion Prevention Systems.
- Deflagration vent panels in accordance with NFPA 68 Standard on Explosion Protection by Deflagration Venting.

Additionally, alternative explosion control systems currently exist, and language in the next edition of FCNYS should also include flexibility for other potential solutions outside of NFPA 69 and NFPA 68.

Current code also does not require that any substantiating documentation be provided to AHJs to demonstrate the effectiveness of the explosion control system to either mitigate against the impact of an explosion or prevent an explosion from occurring altogether (e.g., Computational Fluid Dynamics (CFD) analysis, sizing calculations, or physical testing of the explosion control system). This gap has been addressed in *NFPA 855 and APS Appendix W* and similar language is recommended for updates to the FCNYS.

The 2023 NFPA 855 also includes language which requires testing of deflagration mitigation measures when designed into BESS cabinets (9.1.5.1.4), with validation of the effectiveness of the system demonstrated through fire and explosion testing and engineering evaluation.

Additional language relating to explosion control systems is currently provided in **2023 NFPA 855**, **Arizona Public Service (APS) Appendix W**, and **FDNY 3 RCNY 608-01(h)(4)** and should be consulted in developing the explosion requirements in the next edition of FCNYS.

Referenced Codes / Standards:

- **2023 NFPA 855:** 9.6.5.6 Explosion Control, 9.1.5 Fire and Explosion Testing, A.9.6.5.6, A.9.6.5.6.3, A.9.6.5.6.4
- APS Appendix W: 2 Applicable Standards and Codes, 4 System Design/Layout, 6 Fire and Explosion Detection, Alarm, Control, and Suppression/Protection, 7 Modeling, 13 Documentation
- FDNY 3 RCNY 608-01: (h)(4) Explosion Mitigation

3. FCNYS 1206.7.1 FIRE MITIGATION PERSONNEL

Require that qualified personnel are available for dispatch within 15 minutes and able to arrive on scene within four hours to provide support to local emergency responders.

In the event of a BESS fire, it is critical that qualified personnel or representatives of the site owner/operator with knowledge of the BESS installation can be deployed on-site to support local emergency responders. Section 1207.1.8.1 of the upcoming 2024 IFC requires that, where in the opinion of the fire code official it is essential that trained personnel be on-site, these personnel be dispatched within 15 minutes. The WG recommends that this is required for all projects—not only where deemed essential by the fire code official—and that these fire mitigation personnel are able to arrive on scene within four hours to provide expert guidance to local first responders. Additionally, the WG recommends that these personnel be familiar (e.g., successfully completed <u>ICS-100, ICS-200</u>, and <u>IS-700B</u> training courses) to effectively coordinate with local public emergency services during an event.

One way to address this recommendation may be to adopt a certification program similar to FDNY's B28 Certificate of Fitness. Exploring other approaches beyond code changes (e.g. legislation) may also help address these concerns effectively.

The WG also recommends that the Fire Code require a qualified person knowledgeable about the project and associated hazards be immediately available via phone. Additional information on this recommendation is in the "Systems Monitoring" recommendation below.

Referenced Codes / Standards:

- 2023 NFPA 855: 9.6.6 Remediation Measures, C.1.1 Emergency Responder Pre-incident Planning
- 2024 IFC: 1207.1.8.1 Fire Mitigation Personnel
- FDNY 3 RCNY 608-01: (c)(5) Supervision, (i)(4) Technical Assistance, (i)(5) Emergency Management

4. FCNYS 1206.11.8 SIGNAGE

Extend safety signage requirements beyond the BESS unit itself to include perimeter fences or security barriers and include a map of the site, BESS enclosures, and associated equipment.

These signs should clearly display 24-hour emergency contact information and relevant hazard warnings, ensuring improved safety and clear communication for emergency responders and the public. All relevant hazard warnings indicated on signage or maps should identify and display isolation distances response personnel should maintain from BESS involved in fire or where there may be a risk of explosion or deflagration. It is critical that this information be accessible outside the project fence line for the health and safety of first responders.

a) The WG recommends the FCNYS directly include signage requirements and/or applicable NEC references for grid-interactive BESS operating in parallel with other power generating sources. The FCNYS requires compliance with all applicable NEC signage requirements, which can involve multiple different sections depending on the system design. Section 1207.4.8 of the 2024 IFC addresses signage for multiple energy systems. b) Update the Fire Code to require clear and apparent identification of explosion control panels. This measure will help ensure that first responders can easily recognize and stay clear of the respective hazard zones, reducing the risk of accidents and facilitating a more efficient and secure emergency response. Section 911.4.1 of the 2024 IFC addresses signage for deflagration venting, though this language may need to be expanded to include other methods of explosion control in addition to deflagration.

5. FCNYS 1206.9.2.1 SYSTEMS MONITORING

Update the Fire Code to ensure that Battery Management System (BMS) data is monitored by a 24/7 staffed Network Operations Center (NOC). Critical failure notifications should be immediately communicated to the site owner/operator to take corrective actions as necessary.

The WG recommends that the Fire Code require that Battery Management System (BMS) data be monitored 24/7 by a Network Operations Center (NOC) / Remote Operations Center (ROC), staffed by trained personnel with working knowledge of the BESS and sites under their purview. Additionally, the WG recommends that NOC/ROC staff be immediately available to relay relevant data to the local fire department to help guide emergency response if requested.

The NOC could fulfill the recommendation that a qualified person be available for immediate phone consultation found in the last paragraph of the Fire Mitigation Personnel recommendation section.

The NOC providing 24/7 remote monitoring of the BMS or Energy Storage Management System (ESMS) should have the ability to immediately relay alarm notifications indicative of a thermal runaway or other battery failure event to the system owner, O&M company, or other associated parties. Additional information and language for reference is available in 2023 NFPA 855 and FDNY 3 RCNY 608-01.

Referenced Codes / Standards:

- 2023 NFPA 855: A.4.3.2.1.4(3)
- FDNY 3 RCNY 608-01: (g)(2) Remote Monitoring, (i)(1) Remote Monitoring of Battery Management System and Reporting, (i)(3) Remote Monitoring at Constantly Attended On-Site Location

6. FCNYS 1206.11.9 SECURITY OF INSTALLATIONS Update the Fire Code to incorporate requirements for closed-circuit television (CCTV) systems, specifying their intended use as both a continuous monitoring tool and a post-event analysis resource.

This update would be specific to New York, as it is not currently incorporated into NFPA 855 or the 2024 IFC. The WG has learned that CCTV systems can play a critical role in incident analysis, in addition to providing potentially useful real time monitoring capabilities, and therefore the WG recommends including a requirement for CCTV. Access to CCTV footage should be available to emergency responders during an incident in addition to being provided to the AHJ to assist with post-incident investigation.

7. FCNYS 1206.2 APPLICABILITY

Remove the Fire Code exemption for BESS projects owned or operated by electrical utilities to ensure that all projects comply with the Fire Code.

The removal of this exemption can address concerns relating to access to critical information and jurisdictional authority, promoting safety and accountability. The suggested code revision should be carried out in collaboration with relevant stakeholders to assess the extent of code enforcement authority for public utility projects, maintaining safety standards even in cases involving electric utilities. This recommendation aligns with the proposed language of section 1201.1 in the 2024 International Fire Code (IFC) and should be considered for inclusion, ensuring a consistent and thorough regulatory framework for all energy systems in the state.

Proposed Recommendations for Fire Code Additions

1. EMERGENCY RESPONSE PLANS and REGULAR FIRE DEPARTMENT TRAINING Include a requirement for an Emergency Response Plan (ERP) and annual local first responder training for every BESS installation.

The WG strongly recommends that a site-specific Emergency Response Plan (ERP) be required in the Fire Code update to ensure that every BESS facility is equipped with a comprehensive strategy for addressing potential emergencies 24 hours a day. While existing standards such as fire safety plans in FCNYS Section 403 and 2023 NFPA 855 Section 4.3.2.1 address emergency operations for facility personnel, these standards are not specifically written for first responders. As such, there should be a requirement for emergency response protocols specifically addressing the needs of first responders in the event of a fire, like 2023 NFPA 855 Appendix G.11.2. Appendix G.11.2 is supplemental information rather than a direct part of standard itself. The code should remove any ambiguity around the NFPA requirements and require that system owner/operators provide emergency response plans directed toward first responders and annual site-specific trainings to local fire departments.

This requirement should specify that the ERP must be accessible on-site and shared with the local fire department. Different fire departments may have specific requirements or conditions for presentation of ERPs (e.g., type of lockbox, etc.); therefore, the WG recommends that the FCNYS grant the AHJ the flexibility to determine the most suitable presentation of the ERP based on local fire department needs. This ERP should be developed in consultation with the local fire department to ensure it is in alignment with their operating procedures, capabilities, resources, etc. In all cases, a copy of the ERP must be maintained on-site outside the fence line of the project.

The WG also recommends requiring site-specific training to be provided for local fire departments to familiarize them with the project, hazards associated with BESS, and procedures outlined in the ERP. The WG recommends that annual trainings be provided to address potential turnover in fire department personnel, and that a log of training records be maintained. The AHJ would play a key role in overseeing and regulating the implementation of this requirement, ensuring that BESS installations are well-prepared for emergencies and that all response team members are adequately trained.

Referenced Codes / Standards:

- **2023 NFPA 855:** 4.3.2.1 Emergency Operations Plan, G.11.2 Emergency Responder Pre-incident and Emergency Operation Planning
- 2020 FCNYS: 403 Emergency Preparedness Requirements

2. CENTRAL STATION MONITORING OF BESS FACILITIES

Include a Fire Code requirement for monitoring of fire detection systems by a central station service alarm system to ensure timely, proper notification to the local fire department in the event of a fire alarm.

The WG recommends that this requirement specify that the central monitoring station must comply with relevant requirements in NFPA 72. The code should also define criteria for triggering alarms and notifying first responders, ensuring that only critical incidents prompt a response from emergency services. The NOC should be available to assist in determining which incidents are critical enough to warrant a response from emergency services. Clarity in the definition and role of central station monitoring in BESS installations is essential to establish consistent and effective practices across different jurisdictions and facility types. The WG recommends referencing the language in section 1207.5.4 of the 2024 IFC.

Referenced Codes / Standards:

- 2024 IFC: 1207.5.4 Fire detection
- FDNY 3 RCNY 608-01: (i)(2) Central Station Monitoring of Fire Protection System
- NFPA 72 Fire Alarm & Signaling Systems

3. FIRE STOPS, BARRIERS, or FIRE BREAKS Mandate the installation of fire stops for all BESS enclosure penetrations to prevent the propagation of fires from one BESS unit to another through these pathways.

While this specific topic is currently not addressed in the 2024 IFC or NFPA 855, incorporating fire stops or barriers can be effective in limiting fire spread in various facilities. To ensure effectiveness of this requirement, the WG recommends that the code update should include guidance on the installation and performance standards of these fire breaks or barriers to ensure there is no propagation of fire across BESS enclosures.

4. PERIODIC SPECIAL INSPECTIONS

Introduce a new provision in the Fire Code mandating industry-funded special inspections for BESS installations to ensure thorough safety and compliance.

The WG recommends requiring special inspections at a regular cadence. The FCNYS should specify a comprehensive scope of inspection criteria, including aspects such as verifying emergency response contacts, system layouts, signage, and other critical components relevant to BESS safety. The frequency of these special inspections should be established to correspond with the specific needs and risks associated with BESS installations. These inspections should be conducted by specialized, third-party experts who possess the necessary expertise in BESS systems.

5. CURRENT PERCEIVED EXEMPTIONS FOR BESS CABINETS Include "cabinets" in all Fire Code requirements that pertain to rooms, areas, or walk-in units, except for fire suppression requirements, as they may be inappropriate for cabinets.

The 2020 FCNYS outlines requirements for outdoor BESS in *§1206.15* and *Table 1206.15* (*Outdoor ESS Installations*), including general requirements within *§1206.11* (*General Installation Requirements*). However, the existing language of certain sections initially only appears to be applicable for indoor and outdoor *walk-in* BESS, as they do not directly address outdoor non-enterable, or *cabinet*,

BESS–contradicting with Table 1206.15–causing uncertainty for the appropriate application and ensuing enforcement of requirements.

Although the Fire Code does state that "the most restrictive [requirement] shall govern" where there are conflicts between sections, the WG recommends removing any ambiguity of *cabinet ESS* applicability for the following requirements:

- §1206.6 Large-scale Fire Test
- §1206.11.9 Security of Installations
- §1206.12.2 Maximum Allowable Quantities of ESS (MAQ)
- §1206.12.4 Fire Detection

This can be accomplished by including "cabinet BESS units" directly into the identified sections, [while ensuring language can be carried over / aligns with the model 2024 IFC (during the NY code update process)] as can be seen below with recommended clarifications (in bold) within the existing 2020 FCNYS language:

The FCNYS defines an energy storage system cabinet as a cabinet containing components of the energy storage system that is included in the UL 9540 listing for the system. Personnel are not able to enter the cabinet, other than reaching inside to access components for maintenance purposes. Historically, cabinets were not directly addressed by several important regulations in the FCNYS. Upon incorporating energy storage system cabinets in existing requirements, it will be important to be clear that requirements apply to rooms, areas, walk-in units, <u>or</u> cabinets, eliminating misinterpretations that would result in redundant requirements (e.g., fire detection requirement in both the room and energy storage system cabinet).

Implementing the recommendations in the previous two sections will help to maintain New York's status as a national and global leader in energy storage fire safety. After months of lengthy discussion and document review among the WG participants, these concrete suggestions are recommended to the New York State Code Council.

Additional Considerations

1. ROOT CAUSE ANALYSIS The WG concluded that the Fire Code may not be the appropriate place to require a Root Cause Analysis (RCA).

The WG identified a need to create a hard requirement for Original Equipment Manufacturers (OEMs) to disclose RCAs to relevant local and state authorities for analysis and evaluation with the intent of promoting continuous improvement of energy storage system fire safety. The WG concluded that the FCNYS may not be the appropriate mechanism to grant government access to RCAs resulting from past or future fires associated with a particular energy storage system product, as OEMs are not directly subject to Fire Code requirements unless they are also acting as project developers. To address potential gaps and establish a clear framework for this requirement, the following suggestions should be considered:

- a) Define the scope of the requirement to include faults that result in a fire or necessitate a response from first responders, making it clear that not all faults require an RCA.
- b) Standardize the format of the RCA submission by creating a template that includes specific information, such as manufacturer and model numbers of components, system schematics,

maintenance logs, operational data leading up to the incident, battery monitoring system logs, and details about fire suppression systems.

- c) Set a deadline for providing the RCA information to the relevant authorities, specifying that it should be delivered within a defined number of days after the incident.
- d) Offer flexibility in the choice of RCA methods and analysis entities but endorse a list of pre-qualified firms or methods to ensure consistency and reliability in the analysis.
- e) Emphasize transparency in the process to facilitate effective communication between local authorities, operators, and OEMs. Transparency is essential for building trust and ensuring that all parties have access to the same data for a comprehensive understanding of the incident.
- f) Consider the inclusion of a requirement for peer review of the RCA to ensure the accuracy and credibility of the analysis.

2. WATER SUPPLY

The WG recommends establishing guidance for water supply, including whether water is appropriate for different technologies, in an emergency response to a BESS fire and determining if more specific requirements are necessary.

Given the challenges associated with fully extinguishing BESS fires and the variability in system capacity and design, the code should consider the intended purpose of the water supply, whether it is for cooling, smoke control, preventing fire spread, or other scenarios. Referencing Chapter 5 of the code and standards like NFPA 1142 may provide a starting point for establishing water supply guidance and requirements. The code should aim to define the specific conditions and scenarios where water supply is necessary and outline the minimum flow rates and water storage requirements, taking into account factors like distance from the water source and the capacity of fire departments for shuttle operations. This information should be detailed and explicit, acknowledging the complexities of BESS facilities and the unique challenges they pose for firefighting. Further discussions should be held by the code council, potentially including relevant subject matter experts, to ensure comprehensive guidelines for water supply in BESS facilities, including exceptions for systems to which water should not be applied in the event of fire.

Referenced Codes / Standards:

- 2022 NFPA 1142: Standard on Water Supplies for Suburban and Rural Firefighting
- 2023 NFPA 855: G.11.2 Emergency Responder Pre-incident and Emergency Operation Planning

3. TRANSFORMERS CONTAINING HIGHLY FLAMMABLE MATERIALS Recommend that the Code Council have further discussions around clearance distances of oil-insulated transformers from BESS.

The WG notes that propagation of fire or heat flux from a BESS fire may pose great risk to non-dry-type (e.g., oil-insulated) transformers, which may exacerbate the impact of a BESS failure incident. FCNYS 1206.15.3 states that energy storage systems located outdoors shall be separated by a minimum of 10 feet from exposures such as lot lines, public ways, and buildings, as well as "other exposure hazards", which oil-insulated transformers could fall under. However, it is not clear that this interpretation has been enforced by AHJs. The corresponding section of 2023 NFPA 855 (9.5.2.6.1), however, notes that BESS are separated by 10 feet from "other exposures not associated with electrical grid infrastructure", implying that this does not need to apply for transformers.

The WG recommends that the Code Council hold further discussions around clearance distance requirements be pursued to determine if clearance distance requirements should be explicitly enforced for oil-insulated transformers in upcoming code. This discussion should include a review of potential updates to standards and requirements.

Referenced Codes / Standards:

- 2024 IFC: 1207.8.3 Clearance to Exposures
- 2023 NFPA 855: 9.5.2.6.1 Clearance to Exposures
- FDNY 3 RCNY 608-01: (g)(1)(C) Separation Distances
- FM Global Property Loss Prevention Data Sheets: 5-4 Transformers

CONCLUSION

After months of careful deliberation and a consensus-based process, the WG intends to submit the recommendations in this document to the Code Council for consideration in the next code installment. The Working Group seeks comments from interested stakeholders on these proposed recommendations for incorporation into the final submission to the Code Council. While the most critical issues identified by the WG could be addressed by better enforcement and adherence to the existing code, the recommendations in this memo have been identified as ways to further improve the regulatory framework for BESS in New York.



ES-interagency-bk-1-v1 1/24

Town of Yorktown Zoning Code Sect. 300-81.5 Battery Energy Storage Systems

- A. Authority. This Battery Energy Storage System Law is adopted pursuant to Article IX of the New York State Constitution, § 2(c)(6) and (10), New York Statute of Local Governments, § 10, Subdivisions 1 and 7, §§ 261 through 263 of the Town Law, and § 10 of the Municipal Home Rule of the State of New York, which authorize the Town to adopt zoning provisions that advance and protect the health, safety, and welfare of the community.
- **B.** Statement of purpose. This Battery Energy Storage System Law is adopted to advance and protect the public health, safety, and welfare of the Town by creating regulations for the installation and use of battery energy storage systems, with the following objectives:
 - (1) To provide a regulatory scheme for the designation of properties suitable for the location, construction and operation of battery energy storage systems;
 - (2) To protect the health, welfare, safety, and quality of life for the general public;
 - (3) To ensure compatible land uses in the vicinity of the areas affected by battery energy storage systems;
 - (4) To mitigate the impacts of battery energy storage systems on environmental resources such as important agricultural lands, forests, wildlife and other protected resources; and
 - (5) To create synergy between battery energy storage system development and other stated goals of the community pursuant to Yorktown's Comprehensive Plan.
- C. Definitions. As used in this section, the following terms shall have the meanings indicated:

ANSI

American National Standards Institute.

BATTERY

A single cell or a group of cells connected together electrically in series, in parallel, or a combination of both, which can charge, discharge, and store energy electrochemically. For the purposes of this section, batteries utilized in consumer products are excluded from these requirements.

BATTERY ENERGY STORAGE MANAGEMENT SYSTEM

An electronic system that protects storage batteries from operating outside their safe operating parameters and disconnects electrical power to the energy storage system or places it in a safe condition if potentially hazardous temperatures or other conditions are detected. The system generates an alarm and trouble signal for off normal conditions.

BATTERY ENERGY STORAGE SYSTEM

A system consisting of electrochemical storage batteries, battery chargers, controls, power conditioning systems and associated electrical equipment, assembled together, capable of storing energy in order to supply electrical energy at a future time, not to include a standalone twelve-volt car battery or an electric motor vehicle. A battery energy storage system is classified as a Tier 1 or Tier 2 battery energy storage system as follows:

- (1) Tier 1 battery energy storage systems have an aggregate energy capacity less than or equal to 600 kWh and, if in a room or enclosed area, consist of only a single energy storage system technology.
 - (a) Battery energy storage systems for one- to two-family residential dwellings within or outside the structure with an aggregate energy capacity that shall not exceed:
 - [1] Forty kWh within utility closets and storage or utility spaces.
 - [2] Eighty kWh in attached or detached garages and detached accessory structures.
 - [3] Eighty kWh on exterior walls.
 - [4] Eighty kWh outdoors on the ground.
- (2) Tier 2 battery energy storage systems have an aggregate energy capacity greater than 600 kWh or are comprised of more than one storage battery technology in a room or enclosed area.

CELL

The basic electrochemical unit, characterized by an anode and a cathode, used to receive, store, and deliver electrical energy.

COMMISSIONING

A systematic process that provides documented confirmation that a battery energy storage system functions according to the intended design criteria and complies with applicable code requirements.

DEDICATED-USE BUILDING

A building that is built for the primary intention of housing battery energy storage system equipment and is classified as Group F-1 occupancy as defined in the International Building Code. It is constructed in accordance with the Uniform Code, and it complies with the following:

- (1) The building's only permitted primary use is for battery energy storage, energy generation, and other electrical grid-related operations.
- (2) No other occupancy types are permitted in the building.
- (3) Occupants in the rooms and areas containing battery-energy storage systems are limited to personnel that operate, maintain, service, test, and repair the battery energy storage system and other energy systems.
- (4) Administrative and support personnel are permitted in incidental-use areas within the buildings that do not contain battery energy storage system, provided the following:
 - (a) The areas do not occupy more than 10% of the building area of the story in which they are located.
 - (b) A means of egress is provided from the incidental-use areas to a public way that does not require occupants to traverse through areas containing battery energy storage systems or other energy systems.

DWELLING UNIT

A building or portion thereof or immobile house trailer, which is used, occupied or maintained as living quarters for one family only and providing complete housekeeping facilities; except that for specialized housing as provided for in RSP Districts, living quarters may consist of sleeping accommodations only, plus individual bathrooms, such dwelling unit having one full kitchen only, free access within the dwelling unit on all floors, one main entrance and only one meter each for gas, electricity and water.

ENERGY CODE

The New York State Energy Conservation Construction Code adopted pursuant to Article 11 of the Energy Law, as currently in effect and as hereafter amended from time to time.

FIRE CODE

The fire code section of the New York State Uniform Fire Prevention and Building Code adopted pursuant to Article 18 of the Executive Law, as currently in effect and as hereafter amended from time to time.

NATIONALLY RECOGNIZED TESTING LABORATORY (NRTL)

A U.S. Department of Labor designation recognizing a private sector organization to perform certification for certain products to ensure that they meet the requirements of both the construction and general industry OSHA electrical standards.

NEC

National Electric Code.

NFPA

National Fire Protection Association.

NONDEDICATED-USE BUILDING

All buildings that contain a battery energy storage system do not comply with the dedicated-use building requirements, including all other occupancy types such as, but not limited to, commercial, industrial, offices, and multifamily housing.

NONPARTICIPATING PROPERTY

Any property that is not a participating property.

NONPARTICIPATING RESIDENCE

Any residence located on nonparticipating property.

OCCUPIED COMMUNITY BUILDING

Any building in Occupancy Group A, B, E, I, R, as defined in the International Building Code, including but not limited to schools, colleges, day-care facilities, hospitals, correctional facilities, public libraries, theaters, stadiums, apartments, hotels, and houses of worship.

PARTICIPATING PROPERTY

A battery energy storage system host property or any real property that is the subject of an agreement that provides for the payment of monetary compensation to the landowner from the battery energy storage system owner (or affiliate) regardless of whether any part of a battery energy storage system is constructed on the property.

SPECIAL FLOOD HAZARD AREA

The land area covered by the floodwaters of the base flood is the special flood hazard area (SFHA) on NFIP maps. The SFHA is the area where the National Flood Insurance Program's (NFIP's) floodplain management regulations must be enforced and the area where the mandatory purchase of flood insurance applies.

UL

Underwriters Laboratory, an accredited standards developer in the United States.

UNIFORM CODE

The New York State Uniform Fire Prevention and Building Code adopted pursuant to Article 18 of the Executive Law, as currently in effect and as hereafter amended from time to time.

D. Applicability.

- (1) The requirements of this section shall apply to all batter energy storage systems permitted, installed, or modified in the Town after the effective date of this section, excluding general maintenance and repair. Battery energy storage systems constructed or installed prior to the effective date of this section shall not be required to meet the requirements of this section.
- (2) Modifications to, retrofits or replacements of an existing battery energy storage system that increase the total battery energy storage system designed discharge duration or power rating shall be subject to this section.
- **E.** General requirements.
 - (1) A building permit and an electrical permit shall be required for installation of all battery energy storage systems.
 - (2) Issuance of special permits and approvals by the Planning Board shall include review pursuant to §§ 300-28 through 300-37 of the Zoning Code of the Town of Yorktown and the State Environmental Quality Review Act, Article 8 of the Environmental Conservation Law and its implementing regulations at 6 NYCRR Part 617 (SEQRA).
 - (3) All battery energy storage systems, all dedicated use buildings, and all other buildings or structures that contain or are otherwise associated with a battery energy storage system and subject to the Uniform Code and/or the Energy Code shall be designed, erected, and installed in accordance with all applicable provisions of the Uniform Code, all applicable provisions of the Energy Code, and all applicable provisions of the codes, regulations, and industry standards as referenced in the Uniform Code, the Energy Code, and the Town Code.
- **F.** Permitting requirements for Tier 1 battery energy storage systems. Tier 1 battery energy storage systems shall be permitted in all zoning districts and shall be subject to the general requirements set forth above.
- **G.** Permitting requirements for Tier 2 battery energy storage systems. Tier 2 battery energy storage systems are permitted through the issuance of a special use permit within all zoning districts, and subject to the Uniform Code and site plan application requirements set forth in this section.

- (1) Applications for the installation of Tier 2 battery energy storage system shall:
 - (a) Address all matters listed in this section, including, but not necessarily limited to, compliance with all applicable provisions of the Uniform Code and all applicable provisions of the Energy Code and matters relating to the proposed battery energy storage system and floodplain, utility lines and electrical circuitry, signage, lighting, vegetation and tree-cutting, noise, decommissioning, site plan and development, special use and development, ownership changes, safety, permit time frame and abandonment. The Planning Board may require additional information pursuant to requirements in Chapter 195, Land Development, and Chapter 300, Zoning, of the Code of the Town of Yorktown.
 - (b) Subject to a public hearing to hear all comments for and against the application pursuant to Town Law § 274-b and Chapter 205 of the Code of the Town of Yorktown.
 - (c) Be referred to the County Planning Department pursuant to General Municipal Law § 239-m if required and referred to interested and involved agencies pursuant to the State Environmental Quality Review Act, Article 8, of the Environmental Conservation Law and its implementing regulations at 6 NYCRR Part 617 (SEQRA).
- (2) Floodplain. Battery energy storage systems are prohibited in designated floodplains and flood zones.
- (3) Utility lines and electrical circuitry. All on-site utility lines shall be placed underground to the extent feasible and as permitted by the serving utility, with the exception of the main service connection at the utility company right-of-way and any new interconnection equipment, including without limitation any poles, with new easements and right-of-way.
- (4) Signage.
 - (a) Signage shall be in compliance with ANSI Z535 and shall include the type of technology associated with the battery energy storage systems, any special hazards associated, the type of suppression system installed in the area of battery energy storage systems, and twenty-four-hour emergency contact information, including reach-back phone number.
 - (b) As required by the NEC, disconnect and other emergency shutoff information shall be clearly displayed on a light-reflective surface. A clearly visible warning sign concerning voltage shall be placed at the base of all pad-mounted transformers and substations.

- (5) Lighting. Lighting of the battery energy storage systems shall be limited to that minimally required for safety and operational purposes and shall be reasonably shielded and downcast from abutting properties.
- (6) Vegetation and tree cutting. Areas within 20 feet on each side of Tier 2 battery energy storage systems shall be cleared of combustible vegetation and other combustible growth. Single specimens of trees, shrubbery, or cultivated ground cover, such as green grass, ivy, succulents, or similar plants used as ground covers shall be permitted to be exempt, provided that they do not form a means of readily transmitting fire.
- (7) Noise. The one-hour average noise generated from the battery energy storage systems, components, and associated ancillary equipment shall not exceed a noise level of 60 dBA as measured at the outside wall of any nonparticipating residence and occupied community building. Applicants may submit equipment and component manufacturers' noise ratings to demonstrate compliance. The applicant may be required to provide operating sound pressure level measurements from a reasonable number of sampled locations at the perimeter of the battery energy storage system to demonstrate compliance with this standard.
- (8) Decommissioning.
 - (a) Decommissioning plan. The applicant shall submit a decommissioning plan developed in accordance with the Uniform Code, containing a narrative description of the activities to be accomplished for removing the energy storage system from service, and from the facility in which it is located. The decommissioning plan shall also include:
 - [1] A narrative description of the activities to be accomplished, including who will perform that activity and at what point in time, for complete physical removal of all battery energy storage system components, structures, equipment, security barriers, and transmission lines from the site;
 - [2] Disposal of all solid and hazardous waste in accordance with local, state, and federal waste disposal regulations;
 - [3] The anticipated life of the battery energy storage system;
 - [4] The estimated decommissioning costs and how said estimate was determined;
 - [5] The method of ensuring that funds will be available for decommissioning and restoration;

- [6] The method that the decommissioning cost will be kept current;
- [7] The manner in which the battery energy storage system will be decommissioned, and the site restored, including a description of how any changes to the surrounding areas and other systems adjacent to the battery energy storage system, such as, but not limited to, structural elements, building penetrations, means of egress, and required fire detection suppression systems, will be protected during decommissioning and confirmed as being acceptable after the system is removed; and
- [8] A listing of any contingencies for removing an intact operational energy storage system from service, and for removing an energy storage system from service that has been damaged by a fire or other event.
- (b) Decommissioning fund. The applicant, or successors, shall continuously maintain a fund or bond payable to the Town, in a form approved by the Town, for the removal of the battery energy storage system, in an amount to be determined by the Town, for the period of the life of the facility. This fund may consist of a letter of credit from a State of New York licensed financial institution. All costs of the financial security shall be borne by the applicant.
- (9) Site plan application. Tier 2 battery energy storage systems shall require site plan approval. Any site plan application shall include the following information:
 - (a) Property lines and physical features, including roads, for the project site.
 - (b) Proposed changes to the landscape of the site, grading, vegetation clearing and planting, exterior lighting, and screening vegetation or structures.
 - (c) A one- or three-line electrical diagram detailing the battery energy storage system layout, associated components, and electrical interconnection methods, with all National Electrical Code compliant disconnects and over current devices.
 - (d) A preliminary equipment specification sheet that documents the proposed battery energy storage system components, inverters and associated electrical equipment that are to be installed. A final equipment specification sheet shall be submitted prior to the issuance of a building permit.
 - (e) Name, address, and contact information of proposed or potential system installer and the owner and/or operator of the battery energy storage system.

Such information of the final system installer shall be submitted prior to the issuance of a building permit.

- (f) Name, address, phone number, and signature of the project applicant, as well as all the property owners, demonstrating their consent to the application and the use of the property for the battery energy storage system.
- (g) Zoning district designation for the parcel(s) of land comprising the project site.
- (h) Commissioning plan.
 - [1] Such plan shall document and verify that the system and its associated controls and safety systems are in proper working condition per requirements set forth in the Uniform Code. Where commissioning is required by the Uniform Code, battery energy storage system commissioning shall be conducted by a New York State (NYS) licensed professional engineer after the installation is complete but prior to final inspection and approval. A corrective action plan shall be developed for any open or continuing issues that are allowed to be continued after commissioning. A report describing the results of the system commissioning and including the results of the initial acceptance testing required in the Uniform Code shall be provided to the Planning Board prior to final inspection and approved on-site location.
 - [2] Energy storage system commissioning shall not be required for leadacid and nickel-cadmium battery systems at facilities under the exclusive control of communications utilities that comply with NFPA 76 and operate at less than 50 VAC and 60 VDC.
- (i) Fire safety compliance plan. Such plan shall document and verify that the system and its associated controls and safety systems are in compliance with the Uniform Code.
- (j) System and property operation and maintenance manual. Such plan shall describe continuing battery energy storage system maintenance and property upkeep, as well as design, construction, installation, testing and commissioning information and shall meet all requirements set forth in the Uniform Code.
- (k) Erosion and sediment control and stormwater management plans prepared to New York State Department of Environmental Conservation standards, if

applicable, and to such standards as may be established by the Planning Board.

- (I) Prior to the issuance of the building permit or final approval by the Planning Board, but not required as part of the application, engineering documents must be signed and sealed by a NYS licensed professional engineer.
- (m) An emergency operations plan. A copy of the approved emergency operations plan shall be given to the system owner, the local fire department, and local fire code official. A permanent copy shall also be placed in an approved location to be accessible to facility personnel, fire code officials, and emergency responders. The emergency operations plan shall include the following information:
 - [1] Procedures for safe shutdown, de-energizing, or isolation of equipment and systems under emergency conditions to reduce the risk of fire, electric shock, and personal injuries, and for safe start-up following cessation of emergency conditions.
 - [2] Procedures for inspection and testing of associated alarms, interlocks, and controls.
 - [3] Procedures to be followed in response to notifications from the battery energy storage management system, when provided, that could signify potentially dangerous conditions, including shutting down equipment, summoning service and repair personnel, and providing agreed upon notification to fire department personnel for potentially hazardous conditions in the event of a system failure.
 - [4] Emergency procedures to be followed in case of fire, explosion, release of liquids or vapors, damage to critical moving parts, or other potentially dangerous conditions. Procedures can include sounding the alarm, notifying the fire department, evacuating personnel, deenergizing equipment, and controlling and extinguishing the fire. Procedures must follow all applicable local, state and national codes.
 - [5] Response considerations similar to a safety data sheet (SDS) that will address response safety concerns and extinguishment when an SDS is not required.
 - [6] Procedures for dealing with battery energy storage system equipment damaged in a fire or other emergency event, including maintaining contact information for personnel qualified to safely

remove damaged battery energy storage system equipment from the facility.

- [7] Other procedures as determined necessary by the Town to provide for the safety of occupants, neighboring properties, and emergency responders.
- [8] Procedures and schedules for conducting drills of these procedures and for training local first responders on the contents of the plan and appropriate response procedures.
- [9] The Planning Board may require additional information not specifically contained herein that would be necessary to provide to the greatest extent practicable, maximum protection of the health, safety and welfare of the general public.
- (10) Special use permit standards.
 - (a) Lot size. Tier 2 battery energy storage systems shall be located on lots with a minimum lot size of 40,000 square feet.
 - (b) Lot coverage. Lot coverage shall not exceed 15% of the area of the lot or 33,000 square feet, whichever is less. "Lot coverage" shall mean the area formed by the outermost perimeter of the footprint of all of the equipment and battery storage units, including the clearance spaces between the individual equipment.
 - (c) Setbacks. Tier 2 battery energy storage systems shall comply with the setback requirements of the underlying zoning district for principal structures, provided that adequate screening can be accomplished within the allotted setback. The Planning Board may determine that the setback be increased to accommodate such required screening.
 - (d) Height. Tier 2 battery energy storage systems shall not exceed 15 feet in height, unless part of a larger structure housing a main use as allowed in the underlying zoning district.
 - (e) Fencing requirements. Tier 2 battery energy storage systems, including all mechanical equipment, shall be enclosed by a seven-foot-high fence with a self-locking gate to prevent unauthorized access unless housed in a dedicated-use building and not interfering with ventilation or exhaust ports. Type and design of fencing shall be determined by the Planning Board.
 - (f) Screening and visibility. A Tier 2 battery energy storage system shall be fully screened from adjacent residential properties, streets or roads on which

it fronts or is visible from, and any other views, which the Planning Board determines is necessary. Views from adjacent commercial properties shall be minimized to the extent reasonably practicable and screened from streets or roads on which it fronts. Screening and buffering may be accomplished using architectural features, earth berms, landscaping, or other screening methods that will harmonize with the character of the property and surrounding area and not interfere with ventilation or exhaust ports.

- (11) Ownership changes. If the owner of the battery energy storage system changes or the owner of the property changes, the special use permit shall remain in effect, provided that the successor owner or operator assumes in writing all of the obligations of the special use permit, site plan approval, and decommissioning plan. A new owner or operator of the battery energy storage system shall notify the Building Inspector of such change in ownership or operator within 30 days of the ownership change. A new owner or operator must provide such notification to the Building Inspector in writing. The special use permit and all other local approvals for the battery energy storage system would be void if a new owner or operator fails to provide written notification to the Building Inspector in the required time frame. Reinstatement of a void special use permit will be subject to the same review and approval processes for new applications under this section.
- H. Safety.
 - (1) System certification. Battery energy storage systems and equipment shall be listed by a nationally recognized testing laboratory to UL 9540 or CAN 9540 (Standard for Battery Energy Storage Systems and Equipment). The systems shall comply with the following codes and regulations along with all other applicable local, state, and national codes for installation, operation, and emergency procedures:
 - (a) UL 1973 (Standard for Batteries for Use in Stationary, Vehicle Auxiliary Power and Light Electric Rail Applications).
 - (b) UL 1642 (Standard for Lithium Batteries).
 - (c) UL 1741 or UL 62109 (inverters and power converters).
 - (d) Certified under the applicable electrical, building, and fire prevention codes as required.
 - (e) Alternatively, field evaluation by an approved testing laboratory for compliance with UL 9540 and applicable codes, regulations and safety standards may be used to meet system certification requirements.
 - (f) NFPA 855, Standard for the Installation of Stationary Energy Storage Systems, 2020 Edition.

- (2) Site access. Battery energy storage systems shall be maintained in good working order and in accordance with industry standards. Site access shall be maintained, including snow removal, in accordance with the conditions and parameters set forth in the special use permit, building permit, or electrical permit, and notwithstanding any provisions therein, at a level acceptable to the local fire department and, if the Tier 2 battery energy storage system is located in an ambulance district, the local ambulance corps. All battery energy storage systems must undergo regular inspections at intervals specified in the plans and documents approved under this section.
- (3) Battery energy storage systems, components, and associated ancillary equipment shall have required working space clearances, and electrical circuitry shall be within weatherproof enclosures marked with the environmental rating suitable for the type of exposure in compliance with NFPA 70.
- I. Permit time frame and abandonment.
 - (1) The special use permit and site plan approval for a battery energy storage system shall be valid for a period of 24 months, provided that a building permit is issued for construction and construction is commenced. In the event construction is not completed in accordance with the final site plan, as may have been amended and approved, as required by the Planning Board, within 24 months after approval, the applicant or the Town may extend the time to complete construction for 180 days. If the owner and/or operator fails to perform substantial construction after 36 months, the approvals shall expire.
 - (2) The battery energy storage system shall be considered abandoned when it ceases to operate consistently for more than one year. If the owner and/or operator fails to comply with decommissioning upon any abandonment, the Town may, at its discretion, utilize the available bond and/or security for the removal of a Tier 2 battery energy storage system and restoration of the site in accordance with the decommissioning plan.
- **J.** Enforcement. Any violation of this battery energy storage system section shall be subject to the same enforcement requirements, including the civil and criminal penalties, provided for in the zoning or land use regulations of Town.
- **K.** Severability. The invalidity or unenforceability of any section, subsection, paragraph, sentence, clause, provision, or phrase of the aforementioned sections, as declared by the valid judgment of any court of competent jurisdiction to be unconstitutional, shall not affect the validity or enforceability of any other section, subsection, paragraph, sentence, clause, provision, or phrase, which shall remain in full force and effect.

L. Conflicts with other provisions of this Chapter 300, Zoning. Any provision of this section that conflicts with other provisions of this chapter take precedence and shall be enforceable as it pertains to uses under this section only.