

## CLIMATE COMPLIANCE LEASE CONCERNS

Obligations for and related text relating to compliance with laws and attention to advances in security as well as green stewardship for sustainability have found their way into commercial lease forms and culture. What about the arising reality of climate change and its impact on commercial leases and operation continuity? In another life as an auditor for the State of Kansas, I remember writing a report on computer security and continuity of operations relating with asset preservation and protection. In fiscal year 1974-5 I had finished an audit of the University of Kansas data/computer central systems for the Legislature of Kansas, Division of Post Audit. It was, for its time, an interesting review of concerns for protecting data and programs/systems for the State as well as assurance of continued operations and recovery in the event of disasters such as fire, flooding and other casualties caused by extreme weather. As no surprise to anyone today, Kansas was and still is the focus of horrendous tornados and wind shears made worse annually by changes in our climate. With those weather forces came much flooding and probability of electrical and natural gas fires as well as fried hardware. Those weather circumstances coupled with the then prevailing practice of putting the very heavy IBM 1401 and 360-155 computers in basements for protection and to accommodate the extreme floor loads of these monster machines, created considerable risk of damage from flooding and casualty. So the appropriate thing to say in my first audit report addressing the computer systems and operations was to reflect concern on locations of such computer centers as well as the backup power generators and electrical/lightning surge protection.

Not much attention was given to the recommendations on relocation of computer systems from basements or other below grade areas to above flood and water infiltration prone levels and installation of power back-up generators to upper floors and under roof and lightning protections. At that time we read that the earth was leaving the ice age and moving into a more warming (but less inviting) global climate. Concerns of various organizations at the time such as the American Institute of Certified Public Accounts were just emerging and advocating promulgation of standards for review/audit of data processing centers and asset protection from casualty events.

Fast forward to the late 1980s and early 1990s and concerns for protection of data processing systems and trading centers began to evolve. Concerns for extreme weather had not really caught on and global climate aggravation © Wood, 1992, or global climate catalyzation © Wood, 1992 was only on the radar of organizations like NASA and NOAA. Though as the decades rolled by, organizations such as ASHRE (American Society of Heating, Refrigerating, and Air-Conditioning Engineers) and other organizations began to make recommendations for location and protection of data processing and trading/network systems. Insurance companies and societies such as UL (Underwriters Laboratories) got into the discussion as well.

Today after massive damage to electrical, plumbing, backup generator and data processing/telcom systems from severe storms in lower Manhattan and all along the eastern seaboard, it is of little mystery to large real estate facility users that owners/landlords and sole users must adopt standards for continuity of operations and preservation and safeguarding of systems and assets. The rub is for existing building renovations or retrofitting – who will pay for the necessary renovations? While the issue of who should pay is one of leverage and market, the standards of need when evaluating locations for corporate operations and specifications or work letter lists for remediation are not so controversial. Concerns like these should make their way to due diligence checklists for site locations and moves without much controversy. Whether such substandard conditions remediation costs for capital improvements to assure future operations should be included in escalations and amortized over 15 -30 years and/or included in base years for escalations must be addressed. However the first order of priority would be to include in long term commercial leases the obligations of the owner/landlord to undertake the reconfigurations or renovations to protect electrical/telcom/network systems, plumbing and waste backup systems and provide infrastructure protection for the now obvious global climate catalyzation/weather agitation evolution. It is the writer's recommendation that for all long term leases for any significant space size, that the landlord's obligations be addressed and as a minimum to cause the landlord's work for delivery of the demised premises to include design and delivery of the building systems in the following conditions: (i) electrical systems, transformers, backup batteries/generators (and exhaust), switch boxes and vaults to be relocated well above the expected flood levels given climate catalyzation (main feeder cables to be water sealed), (ii) elevators and other hoisting to have hydraulics and lift mechanisms well above drain and flood levels, (iii) hvac, chiller towers, air intake, exhaust and other climate/humidity/filtration components above floor and drainage levels and well protected and louvered and located for wind and shear avoidance, (iv) presence of anti-surge and backup topping on below grade sewers; (v) minimum backup systems for fire, signage and evacuation with evacuation locations sheltered and above anticipated flood levels, (vi) storage and data centers and mechanical floors above anticipated flood levels and (vii) fire recall and communications systems in sheltered conduits and runs with redundancy for communication failures. The issue of who pays for these capital disbursements over time is not as difficult to paper in commercial leases as inserting the obligations for the owners/landlords do to such and under what standards the new construction and renovations/reconstructions such should be mandated and when.

So best practices would now include the practice of including in checklists for commercial leasing the need to include climate aggravation/catalyzation upgrade standards and timing of changes to commercial properties and inclusion of protections for delivery conditions for new and existing complexes as well as the allocation of funding of same.