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August 10, 2007

Robert Dobruskin
Director, Environmental Assessment and Review Division
NYC Department of City Planning
22 Reade Street, Rm 4E
New York, NY 10007

Dear Mr. Dobruskin,

The Webster Consulting Group is a consulting firm working on energy policy, technology, and economics. We are writing to request an Energy Assessment for the redevelopment of the Domino Sugar Refinery site.

The developer, the Refinery LLC, has stated in the scope of work document that "according to the CEQR Technical Manual, actions resulting in new construction would not create significant energy impacts because all new structures requiring heating and cooling are subject to the New York State Energy Conservation Code, which reflects State and City energy policy. *Therefore, a detailed energy assessment is not required* [my italics]." [Draft Scope of Work, Task 15, p 22]

We are concerned that by not performing a detailed energy assessment, potential consequences of this major property re-purposing will not be identified. If the potential consequences are not identified, they cannot be considered and addressed prior to development. The neighborhood and the city must anticipate and prepare for these consequences, or require that plans be altered to avoid them.

In our experience, managing the unintended consequences of industrial property re-purposing is virtually impossible once the site has been developed. If public officials have not required developers to consider – in advance and in detail – the unique energy consequences of such a dramatic site re-purposing, public officials can become easy targets for the media and the angry public should something go wrong.

The Domino Sugar Refinery project amounts to a massive conversion of dormant industrial space to large-scale residential use—*an extreme change in use*. The developer is using a stipulation in the CEQR Technical Manual – that the project will conform to the New York State Energy Conservation Code – to avoid performing an Energy Assessment of the Domino Sugar project as part of the Environmental Impact Statement (EIS) process:

> All new structures requiring heating and cooling are subject to the New York State Energy Conservation Code, which reflects state and City energy policy. Therefore, those actions that would result in new construction or substantial renovation of buildings would not create adverse energy impacts, and would not require a detailed energy assessment. –CEQR TECHNICAL MANUAL, §N,200, p 10/01

However, we believe the sentence that follows the preceding passage in the CEQR Technical Manual provides important guidance:

> A detailed assessment of energy impacts would be limited to actions that could significantly affect the transmission or generation of energy or that generate substantial indirect consumption of energy (such as a new roadway that could lead to a substantial increase in the number of vehicle miles traveled, and thus, fuel consumed in the City). --CEQR MANUAL, §N,200, p 10/01

We believe this passage requires developers to provide detailed energy analyses for projects which represent dramatic changes in property use in the City. The Domino Sugar Project is such a project. It will substantially affect (i.e. change) the transmission, generation, and overall consumption of energy in the City.

The areas of potential impact that should be explored in an energy assessment include, but are not limited to the following:

- Residential power requirements are different from industrial requirements–usually much greater for the same square footage–and are more sensitive to diversity factors. This is a massive primarily residential complex. How will this development of as many as 2,400 individual units impact the reliability of electrical power in the neighborhood? Will it require additional local gas-fired power stations with impacts of their own?

- In comparison to smaller projects, proposing this large a number of units requires a much more thoughtful determination of the approximate electrical load of each and of a diversity factor to allow for a wide range of electricity consumption. Although industrial usage can be predictable, residential electrical usage is less so. Excess capacity needs to be built in and backup systems considered. Energy utilization will continue to be a key issue for the foreseeable future and should be evaluated for every new and converted structure. This is particularly true of "luxury" building, which might be expected to have more electrical usage than the average.

In addition, Webster Consulting Group takes the view that projects like the Domino Sugar Refinery development offer opportunities for 21st energy initiatives. Each project such as this can help us all rethink policies on energy and energy consumption that reflect the current energy situation.

The Domino Sugar Project represents a unique opportunity to consider taking steps toward conversion of New York City from carbon-based energy production to solar and other forms of renewable energy. At a minimum, it seems to us that it would be useful for the developer present a *full* impact analysis of this project, including an energy assessment.

Issues to consider should include, but are not limited to the following

- New York experienced a widespread blackout in 2003 and another in 2006. The Williamsburg neighborhood has experienced power outages. This suggests that some consideration should be given to distributed power generation--solar, geothermal, and perhaps technology generating energy from the currents in the East River. Solar is beginning to be used in some New York buildings to provide at least some of the electrical need. And geothermal heating/cooling has been used in a conversion along the Brooklyn waterfront (the Esquire building). We suggest that opportunities for power from renewable sources be evaluated for this project. Solar, in particular, allows for decentralized power generation. The project should strive to be at least partially self-sustaining without putting an additional drain on the grid.

- With regard to light and air circulation in the surrounding vicinity, the issue is more than a public health or aesthetic issue. The heights of buildings may impact future utilization of solar and perhaps even wind power in the vicinity. Owners inland from the new Domino structures who wish to adopt low-carbon-impact solar technology may find themselves in the shadow of a large structure and unable to utilize a solar array on their own properties.

- The use of "passive solar" techniques in design should be explicit. Rather than trade-offs between insulation and clean energy, we need both to meet the challenge of global warming.

The spirit of an impact statement should be to show how environmental concerns have been addressed in the design as well as to disclose the anticipated environmental impact of the construction.

The Domino Sugar Project is a high-profile project, one that could become the model for the steps necessary to address the energy challenges that New Yorkers face – both now and in the future.

We believe an Energy Assessment for the Domino Sugar Project is an important first step.

Very truly yours,

David Webster

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About the author –

David Webster is founder and president of The Webster Consulting Group, Inc., a management consulting firm based in Lehigh Valley, Pennsylvania.

Founded in 2000, The Webster Consulting Group has provided strategy, policy, and economic consulting services for a wide range of private and public clients.

David's insights are aired frequently on CNN and National Public Radio, and he has been frequently cited by the *Wall Street Journal*, the *New York Times*, *Business Week*, *USA Today*, and other major publications.

David holds a Ph.D. in Economics from the University of Chicago, where he specialized in Urban Economics.