

Data Centers LLC Community Information Session Questions

1. What will happen if the zoning exemption granted through UD (Star Campus) is challenged successfully in opposition to your project?
2. Where has this model been implemented previously? Where is something like this up and running?
3. You have stated that 200,000 tons of co2 emissions per day, and at present you do not have a purchaser for the co2. will try to reuse a % how would a carbon tax affect you?
4. Please explain how the city of Newark can eliminate the council's approval or vote on the Newark Power Plant? Where is the voice of the people?
5. I live 4 houses from the train tracks on apple road, which is directly across from your site. Will I be able to hear birds? Will I be hearing the constant hum of low level "conversation"
6. If this is a natural gas plant, what will happen when we run out of fossil fuels? Natural gas is a non-renewable resource and we will run out at or before mid-century
7. You have never done this before. I heard nothing tonight about public safety
8. What specifically do words like unique, intended & very secure- what is very secure? My water? My air?
9. At what natural gas price is this project no longer economically viable assuming connect data center rates (reserve?)
10. Will conversation level sound at nearest home be 24 hours a day will there be additional sound from co2 recapture equipment
11. How does this data center improve a student and faculty life on the UD campus? If it does not benefit students/faculty directly why should we want this on our campus
12. Has this company ever constructed any building since its formation?
13. Where will employees park? I don't see 600and parking spaces on the architectural drawings.
14. Why do you believe berms will control the humming noise from turbines? How many berms- how high, where?
15. Sound: will it be a constant hum? What will it sound like?
16. Co2 and nitric oxide emissions, what health effects are there?
17. Cold weather and gas supply?
18. Why would you plan to build a power plant in a high density area? Wouldn't this project make more sense in a low density region?
19. How near to the power plant is the closest school
20. How near to the power plant is the closest playground?
21. How near to the power plant is the closest neighborhood?
22. What are your plans if the city of Newark prevents you from building a power plant because of new zoning rules?
23. Where is the location of the power plant on the Star campus, and how many acres is the power plant footprint?
24. How many acres is the data center's footprint
25. What concerns might there be for the new substation that may be built? Will any homes be in close proximity to high voltage power?

26. What are TDC's concerns about the close proximity of oil tanks, cars, and high-speed rail?
27. As this is not a retail business, why wouldn't you locate it in a remote location?
28. I am worried about the nearness of highly explosive oil tank cars being parked close to my home- and close to the data center- a great danger in case of train accident to both employees and residents. How will the data center address this danger?
29. Our quality of life for communities within 1 mile will be greatly impacted if our concerns of noise, light, property values, and emissions are not addressed and resolved, how will you insure that you are looking out for our interests, too?
30. Will the "data" area be safe? Next to a lone line of oil tankers on tracks -> a possible conflagration
31. Why was council "sworn to secrecy"?
32. What emergency safety risks does the power plant pose to residents across the tracks in closely neighboring residential areas?
33. On the posters scattered around the room, the background beyond the trees is all greyed out. What infrastructure lies in this greyed out area?
34. It is common knowledge that property values decrease in the vicinity of power generating facilities such as the data center. What is the data center going to do to compensate owners and members of the community that are affected by the data center?
35. How will co2 emissions be monitored on a daily basis? Will this be public info?
36. Has anyone addressed traffic concerns? This area is already often congested.
37. If trains are derailed, your facility is protected by berms. If, during an electrical storm, or some other electrical problem occurs and it sparks the oil in the long train of oil cars, there could be a conflagration
38. Perhaps this is an extreme case, what about terrorism?
39. You will sell to grid, and not auxiliary operation, correct?
40. Homes in Devon are $\frac{1}{8}$ mile not $\frac{1}{2}$ mile
41. In July 2012, who did you meet with from the city? What was the conclusion of the meeting? When did council find out about the project?
42. Why 2 gas pipelines? Why not be really environmentally efficient, using solar and wind? (As GOOGLE and APPLE do)
43. Why is it fair to compete with the city-utility sale of energy?
44. You've already revealed that the power plant will be natural gas fired. Will it be a combined cycle plant? Will the cooling tower be plume aerated? What is the estimated heat rate for the plant? What is the estimated noise level at bordering residential neighborhoods?
45. Is Data Center LLC regulated by the Public Service Commission?
46. Will you be connected in any way with the national security agency?
47. My question about transparency: Why are you not letting it be known that you're a member of the Sierra Club and is it because Chesapeake Energy the natural gas provider for the power plant gave the Sierra Club \$26 million dollar in secret payments to promote natural gas as a bridge fuel to a low-carbon future?
48. Has the wake study been completed, and what is the plan to share wake study info with city residents?

49. What is the annual tax revenue to the city, the school district, and the county? What part will be paid to U of D?
50. Does City Council have the final say as to whether this project is approved? If not, who does?
51. Apple, Google, and others use off-site renewable energy to power data centers. Why not follow the most successful companies in the world? Why not ask Newark residents what they would prefer? Have you done an in depth alternatives analysis at the site?
52. What are your plans for analysis by an independent third party to evaluate the project's positive and negative impact on the Newark community?
53. There has been considerable uproar in the community about the power plant, but yesterday on WDEL talk radio, you stated that you called for this meeting, is this accurate?
54. Say the power plant does not conform to the procedures made this evening, in reference to air and water quality, noise, property value, etc. Who will be ultimately responsible? You, the power plant operators? The trustee of the university? The city of Newark?
55. I understand that the power plant portion of the project has been classified as "incidental" and subordinate to the data center. Is this correct, what project parameters were evaluated and how was the decision reached?
56. What are the dangers of putting such a power plant in place, and why are there so many confidentiality agreements? What are these confidentiality agreements? What are the implications and effects that the power plant & confidentiality agreements will have on the people of Newark DE?
57. Why did the city staff sign confidentiality agreements? How frequently does that happen and what was the last completed project that can now be disclosed that the staff signed confidentiality for?
58. Which elected officials have you met with about this project?
59. If you fail as a data center or business, would this or could this site be used as a standalone power plant?
60. You mentioned that 18% of the US data traffic travels through Newark, will adding a major data center servicing the cloud make the star site more vulnerable to terrorist activity to try to disrupt US data traffic? How will TDC secure the site?
61. Did you meet at Sierra Club?
62. Why do you think gas is a good idea when fracking is poisoning our water supply?
63. Do you believe TDC does not need to get a rezoning through council for this 248mw facility? They claim to need 108 mw for the data center.
64. Was there a confidentiality agreement between the company and Newark City Council? If so, please describe it. Why was it required?
65. TDC – Star Campus Site do you believe you are legally allowed to build a 248mw gas power plant without rezoning?
66. New Castle County has very poor air quality. Gas burning creates OZONE very bad – Why subject city residents?
67. Does the Data Center LLC really have sufficient financing to actually do all this?
68. What is the sound level 1/10 of a mile at the site? 2/10 of a mile? What could cutoff this project. In other words is this a done deal?

69. What level of LEED certification will Wolf I or other buildings attain? ALSO how will this affect research facilities across the street at the university? There are gardens and farm etc, and it seems this should be kept in consideration.
70. Which level of LEED certification will you have?
71. Have you sought a proposal from PJM to provide electricity prior to deciding to build the electrical generating station?
72. Does the sound estimate include co2 transport tracks? Sound 24-7-365?
73. What technology is being used to reach your estimated 45% recapture of co2? And has this technology been used commercially to date as that we are assured this recapture rate is fully feasible
74. If you don't have the customer base for the data center, will you generate less power?
75. Would you consider accepting further and more involved questions on your web site? And posting and answering the responsible questions?
76. What is your track record before the project?
77. Does the extra costs required for the berm and other protective measure stemming from natural gas usage really outweigh the costs of using renewable energy?
78. A surplus of electricity will be generated- over and above what the data center will use. Will surplus be sold? How? Will/might such spaces impact Newark's revenue from electricity sales?
79. Will this raise or lower my home value?
80. Who is the architect firm and where are they located? Who is the construction manager and WHERE ARE THEY HEADQUARTERED?
81. You dance around the noise question. In 1 mile will I have a quiet conversation while I watch TV?
82. Would it be possible to move the power plant further out of town and pump power back to the data center?
83. How come this is the first time the public has heard about the project? After how many years?
84. During construction: what exit will the trucks use? Debris/dust/noise lower than Chrysler demo?
85. How tall will the building be and how far away will I hear the operation
86. What % of TDCs revenues at this site will come from sale of power? Does this % go up as server technology is becoming more energy efficient?
87. What are the terms of agreement with UD? What is the lease term? What happens if this is not a successful endeavor?
88. Why is TDC not planning its facility in a more industrial area further from residential centers?
89. It seems that you'll have a huge, flat roof; you said earlier that solar didn't fit in your plans or finances. Why isn't that? Wouldn't solar cost the same or less initially, and you save you lots of money in the long term? It would also not create any noise or nox a leading precursor to ozone.
90. How will this site affect property values? Also please explain your acronyms, not everyone here has an engineering background.
91. What guarantee will Newark have that none of the IT jobs will be outsourced and any future jobs will not be outsourced?
92. What will be the net daily use of water? Monthly, annual? Where is the water coming from?
93. Will new pipelines cross white clay creek? Where is the pipeline route?

94. Why not natural gas which is polluting to bring up the ground? Why not solar?
95. What level of LEED certification are you aiming for? The highest LEED cert was given to a data building in NYC but the tenants are using way more energy than planned. LEED applies to the building, not the use.
96. UD has recently constructed a LEED building but it's not actually LEED certified, only "Equivalent" by UD's definition. Will the Data Center be ACTUALLY LEED certified, or only "equivalent" by its own determination?
97. What do you mean by buying local? Do you mean small businesses in a 5 mile radius? Or Lowe's or Home Depot or Wal-Mart? Or something else?
98. The Data Center says it is environmentally friendly why not use solar? Natural gas is not clean. Where will the natural gas be coming from? Is this going to increase fracking in DE?
99. How does the environmental impact of this facility compare to the auto plant it replaces?
100. Why was your presentation given by your HR person instead of Site Supervisor?
101. With all of the open areas in the state, why are you putting a toxic place in the middle of a city of 30,000 people?
102. Air permit process, next couple weeks? Application and approval in same time span? What about public hearings on air permit?
103. What about the health risks associated with living next to high voltage? IE higher incidences of certain types of cancer, neurological disorders, etc.?
104. Do you have a currently operating site with this technology? If so, where?
105. Will these be DE union jobs? Tax exempt as UD facility?
106. How much water will the complex draw? Where is the water supply source(s)? How will this be discharged?
107. How exactly will natural gas be supplied to the data center? The presentation said CO₂ would be captured, but what about other gases? Is renewable energy like wind solar an option for this facility?
108. Will a natural gas facility add an increased risk to the surrounding Newark area, considering the nearby location of the railroad? How is this risk accounted for? Especially if the source of the gas is a pipeline?
109. Why should city residents bear the brunt of this project for jobs for people outside of Newark or even DE?
110. Will the 290 jobs be hired from DE? ESPECIALLY the high paying jobs?
111. Is this a done deal already? It sounds like construction is proceeding already. Ms. Houck keeps saying "we" and "our story" as if the City of Newark and TDC are one unit.
112. Our neighbors are already flooding because of the antiquated sewer/flood water system. What are you going to do about overburdening an already inadequate system?
113. How many jobs will be attributed to the data center IE running servers vs. for running the Newark power plant? How many IT jobs will be consultant basis (ie no benefits)?
114. After construction is completed, will the full-time and part-time jobs be union?
115. All you will be selling power back to "the grid", will Newark residents still see a decrease?

116. What is the life expectancy of the servers related to the power station? As servers are replaced, increases in efficiency should lower power requirements, - what is then done with the excess power?
117. Is this a done deal?
118. How many cubic feet of natural gas per day will the power plant consume when running at full capacity?
119. How will the natural gas pipelines be routed to the site? What areas would they cross? Where would they originate from?
120. What noise will be generated? What odors will be generated? For example – refinery smells
121. Will the natural gas come from fracking? Are chemicals in the gas drilled by fracking an unexplained source of pollution?
122. We need to know the pipeline routes
123. A natural gas pipeline from locations in PA to Newark is going to have to be built to provide the data center with fuel for its proposed power generation. Where will this pipeline be located, and what type of disturbance to traffic and the community will its construction generate?
124. Disaster preparedness – Do you have a disaster preparedness plan? What can go/has gone wrong at such data centers? What is the source of the natural gas? How is it transported to the data center? How is it burned at TDC?
125. Where are the new pipelines going to be built?
126. Construction jobs – union only? Is this in writing?
127. During the September 2nd WDEL broadcast it was stated that the Data Center/Power Plant project would generate 5,000 construction jobs. What is the basis for this number?
128. Do any of the employees of the Data Centers LLC live in Newark? How near to the power plant will your homes be located?
129. What is the average salary of a TDC employee based on this project?
130. Can you give us an idea of the benefits package your employees will have?
131. How many jobs do you anticipate this bringing, and what breakdown in role/position? What percent might be union jobs?
132. How many permanent jobs will this project create? How many construction jobs? How many ancillary jobs?
133. Will union labor be used to build and staff this plant?
134. How many people will the data center employ?
135. How many employees of the Data Center LLC will be there when completed? Temporary, permanent full-time and permanent part time?
136. How many employees of the Power Plant will be there when completed? Temporary, permanent full-time and permanent part time?
137. How many construction workers will be employed for the proposed project and for how long? Temporary, permanent full-time and permanent part time?

138. Follow up for source is Air Liquefied preparing to use and implement sound muffling devices for their recapture equipment? Also previous noise speculation to the nearest home of conversation level, which would be 24 hours a day?
139. Who will build the power plant? How many turbines? Who will manufacture the turbines?
140. How many and what kind of turbines will be used? Are they simple cycle? How many hours will be permitted to run each year?
141. What noise requirements would the turbines be built to achieve? 50db? 8db? Please elaborate
142. What type of turbine generator will you be using?
143. Originally there was talk of the use of fuel cells to obtain electricity from natural gas, but now we hear of turbines, which imply combustion – a much more polluting process. Which is it?
144. Can you explain SCR- selective catalytic reduction? Do ammonias used in the process? How much ammonia will be on site? Do you have an evacuation plan if there is an ammonia accident?
145. What kind of chemicals will be used on site? Will there be acid, hydrogen, lube oil? Please elaborate.
146. What are the construction materials stored on site, that could explode? What are the risks of an explosion for those living with 1/4th mile? ½ mile? What will the evacuation procedure be?
147. Peak water required? What is the toxicity of desiccant used in cooling IE solid or liquid? Have you talked to Bloom Energy?
148. How much water will the power plant and chillers consume each day? Is this water coming from an aquifer? Where is the discharge going?
149. How much wastewater will there be and where specifically will it be disposed?
150. How many gallons/day of water will this project need? Where will this water come from (specifically, not just the name of the utility)? Where will wastewater go?
151. What commissioning events will be required if this is built? Steam blow off etc.
152. How many gallons of water do you estimate will be used each year?
153. Will there be a cooling tower and exhaust stacks? What kind of emissions would be expected?
154. How will used water coolant be removed? To where?
155. What are the water requirements – will it require an increase in infrastructure?
156. How much waste water is going to be produced, how does this # compare with the waste usage of the old Chrysler site? Can this volume of water be handled by Newark?
157. I would like a discussion of the cooling technology to be used. Wet, dry, hybrid. Scrubber technology and overall estimate (including domestic water consumption
158. All the technical data so far is normally contained in an environmental impact statement. Was one prepared and is it available to the public for perusal?
159. WHY NO SOLAR PANELS
160. Why or why not use solar energy. U of D talks a lot about use/research of “alternative energies”

161. Why don't you ask the written questions?
162. Can your turbine model be successful without an onsite power plant?
163. Other data centers are powered by the electrical grid. Why not run redundant power lines to supply electricity intended of an onsite power plant
164. Apple built a 160 mw data center in North Carolina using solar power, why can't you?
165. Are there discussions with the University of Delaware to buy your excess power after its contract with the city of Newark expires?
166. The power plant will generate 248mw, how many mw will the data center consume? What is the excess capacity of the power plant?
167. During the September 2WDEL broadcast it was stated the data center would have an internal electrical load of 108 mw, does this include the station service load for the power plant?
168. Please explain how a 248mw power plant is subordinate to a data center that uses 108 mw for the IT load. Is the business model selling data after space or power?
169. How is the proposed power plant "incidental" to the data center when it is going to produce all the electricity needed for it and 2.5 times more?
170. How is the proposed power plant on the Data Center, LLC property complimentary to the UD STAR campus master plan proposal of being Green and sustainable? Is the potential power produced in great excess of what is sustainable?
171. Can the 3 nuclear power plants within a 30 mile radius of the STAR campus supply the required power and backup without a natural gas turbine plant in site?
172. How much less power does the data center require relative to the capacity of the proposed power plant?
173. Why with so many renewable options (natural gas is not green or renewable) why not be a technological leader and use solar, wind, or biogas? Apple did it, why can't Data Centers, LLC?
174. The two 138 KV feeders at this site provide highly reliable power (>99.999 reliable) No power plant can provide as much reliability as this? (Typical is 95% reliable) So what is the motivation for not drawing from the 138 kv feeders
175. Will the city of Newark require the data center/power plant project to meet its current chapter 2a noise ordinance? Please state specific sections and noise limits that will be enforced.
176. What are the noise levels from the turbines, chillers, and pumps? How do these compare to the noise ordinances in the city of Newark?
177. How does the power plant conform to the University of Delaware's STAR campus core values of "Develop the campus in an environmentally responsible way" and "to protect the quality of the campus environment as the university expands to meet the needs of its educational mission"?
178. How bright will the proposed facility be? Will you able to meet the STC zoning restrictions for lighting?
179. How tall will the proposed facility be?
180. What is the noise level in db at a distance of 200 yards?
181. How will you develop on the hazardous material that is underground? Have you met with DNREC about the health and safety plan for the development?

182. Are you prepared to develop the data center on the site without the power plant?
183. Is the power plant considered educational, technology, or industry? Are you aware that the property on which you are building this plant was sold for "Educational/technology use"? Are you buying or leasing this land?
184. What night lighting will be used in the Data Center LLC including the proposed power plant and how much will this pollute the night sky for those of us who live ¼ mile away? ½ mile away and 1 mile away? What will this night sky look like? What comparable power plant/data center can we reference?
185. Will there be sound barriers? If so, what kind and what level of containment? How high will they be built? Will they be built in the beginning or the end of the power plant construction? Which company will be used to build the sound barriers?
186. What kind of noise cancellation or muting is planned for the power station?
187. How loud will the turbine engines be within ¼ mile? ½ mile? 1 mile? Will they run 24 hours a day? Is the sound, compared to 5-747 jet engines, comparable? What is the decibel level equivalency? If not, what is an example that we the people can relate to?
188. How much light pollution can we expect? How far will light be visible? Will the sky glow all over town?
189. Noise abatement – what type of technology will be used to reduce noise levels? What are typical decibel levels associated with power plant and data center, rational for the 248 mw power plant?
190. What is the decibel rating at the prop line? Is this power for data center only or will it back feed into public grid?
191. Will it be louder than the crowd noise from a football game, passing train, fireworks display? How does this alleged pollution match up with what was there? Will the taxes on income and business benefit the populace?
192. You have indicated your intent to sell co2. What if there is not sufficient demand? Since those in demand could buy co2 from an existing fossil fuel plant, and one ton of co2 has the same effect on the atmosphere regardless of where it is emitted, on a global effects basis, it is as if all the co2 from your proposed plant is emitted into the atmosphere. Do you agree?
193. How many tons per day of carbon dioxide co2 will the power plant emit at full capacity? How do you plan to contain and resell the co2?
194. How many pounds per day of the following power plant emissions will be produced? Nitrogen oxide, carbon monoxide, sulfur dioxide, particulate pollution, volatile organic compound, h2so4, ammonia, formaldehyde, HAPS.
195. Selective Catalytic Reduction will likely be used to power the gas turbine exhaust NOx to permitted levels. Will anhydrous ammonia be used as the injection agent? If so, what plans will be made for emergency notification and/or evacuation for local residents in case of an ammonia release?
196. There is a potential for the down wash of exhausts gasses into adjacent residential neighborhoods due to the proximity of Iron Hill and the eddy effect that it can generate? Will down wash modeling be performed to verify that the exhaust stack design will not be a problem?

197. What will the power plant do with captured emissions
198. How much waste gas co2 is produced in a day?
199. How do you plan to dispose of waste heat and gasses
200. What opacity will the exhaust emissions achieve? Clear?
201. How do you plan on reducing NOx emissions? Will you have a storage site for chemicals used in catalytic converters like ammonia? How big will chemical tanks be?
202. What specifically are the levels of pollution that can be expected from this project? Pounds per day of each pollutant?
203. What will the NOx emissions be from a 248 mw natural gas power plant? How does this relate to DNREC's caps on NOx emissions?
204. What are the projected emissions levels for those of us who live within a ¼ mile radius? ½ mile and 1 mile? What kinds? How much?
205. TDC claims it will capture the co2. Given that there is only one such plant under construction in the US, and that 10 have been cancelled, what unique cutting edge technology does TDC have that no one else believes will work, to capture the approx 1.3 million tons of co2 annually? What will it do with this co2?
206. What will be the co2 emissions?
207. What are the estimated amounts of pollution from this power plant and what pollutants (amount of each?)
208. How is the co2 going to be continued? Who will purchase the co2?
209. What would the carbon emissions of this plant be in comparison to the emissions of Newark already experience courtesy of interstate 95? Would there be a significant compounding effect?
210. Do I understand 100,000 tons will be released and 100,000 will be recaptured? Will del city and the emissions cannot imagine surviving with asthma/allergies in Newark
211. What guarantees do we have that the items mentioned in the presentation will actually occur? E.g. bermed trees leaves, salary of "high paying jobs"?
212. You mentioned (?) to deal with less of power for one grid. If somehow both lines of power went down, are there any major consequences that may arise? Will there be emergency plans to deal with these consequences just in case?