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TOWN OF JOHNSTON PLANNING BOARD

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MINUTES

OCTOBER 5, 2010

The Planning Board of the Town of Johnston held its regular monthly meeting at 7:00 p.m. on Tuesday, October 5, 2010, at the Johnston Senior Center, 1291 Hartford Ave.

I. **Call to Order**

II. **Roll Call & Determination of Quorum**

The September 21 meeting was called to order at 7:10 p.m. Present for the Planning Board: Thomas W. Breckel (*Vice-Chair*), Michael C. Campagnone, Peggy A. Passarelli, Mohamad Y. Sasa, Patricia A. Aguiar, Lauren A. Garzone, and Anthony Verardo (*Chair*). A quorum was present. Also present for the Town: Timothy J. Chapman, Esq., Planning Board Solicitor, Pamela M. Sherrill, AICP, LEED AP, Administrative Officer & Town Planner, and Ben Nascenzi, Building Official in his role as ex-officio member of the Industrial Performance Commission.

III. **Minutes**

Motion was made by Mr. Breckel, seconded by Mr. Campagnone, and vote taken to accept the August 3, 2010 minutes as amended. Motion was made by Mr. Breckel, seconded by Mr. Sasa, and vote taken to accept the September 21, 2010 minutes as amended.

IV. **Public Hearings**

- A. **Johnston Combined Cycle LFG Plant**, *Industrial Site Plan review* (PB '10-32). Proposed construction of a combined cycle landfill gas power plant on 14.85± acres out of 146.72 ± acres at 38, 40 & 42 Shun Pike & 2 Recycle Road; A.P. 31/Lots 45, 46, 47*, 49, 55, 58, + 61*; A.P. 43/Lots 36, 402, 567*, + 588 (* = portion); zoned Industrial; applicant, RI Central Genco, LLC; owner, RI Resource Recovery Corporation.

Richard Licht, Adler Pollack & Sheehan PC, representing the applicant, provided an overview of the project, including 25 year history of the existing Ridgewood landfill gas renewable energy



plant. Due to RIRRC landfill expansion, the existing 12-MW LFG facility must be relocated. Based on Internal Revenue Service requirements for Renewable Energy Credits, the foundations for the gas plant must be in the ground by December 31, 2011.

Lonny Kirk, DCO; David Bibian, Jacobs; and Stephen Galowitz, Ridgewood Renewable Power where sworn in.

Mr. Galowitz, sponsor and developer of the project, is the owner and operator of the current LFG plants at the landfill. In response to a question by Mr. Campagnone, Mr. Galowitz indicated that the existing plant must be relocated based on a 2007 Statewide Planning exercise. They entered into negotiations with RIRRC for relocation to avoid condemnation procedures. The intent is to improve the methane gas collection system (not subject to this application) and build a larger, state of the art facility with interconnection to National Grid. The proposed plant has been designed to reduce greenhouse gas emissions and odors, and to more fully utilize landfill gas for profit. He indicated that the payments in lieu of taxes to the Town of Johnston, annual payments to the Johnston School Department, and hiring preference for local firms have been or will shortly be initiated. Project financing is dependent upon receipt of \$50 million in government grants that require the start of construction in 2010.

In response to Mr. Verardo's question, Mr. Galowitz indicated that the plant has been reduced in scale from 6 to 4 turbines to reflect current and projected landfill tipping practices. Although the interconnection to the grid is not a bottleneck, there is available space, and certain aspects of the plant can be expanded, expansion of the proposed plant is not foreseen as the existing 6-MW Cat plant offers system flexibility. Although the level of specificity is quite detailed, additional design is required for local Preliminary and Final Plan approval.

In response to Mr. Breckel's question regarding EPA concerns regarding existing health dangers from methane releases, Mr. Galowitz indicated that RIRRC is operating in compliance with regulations and that EPA has been very supportive of projects such as this and the proposed project in particular. Typical methane collections are 75 to 80 percent effective; the proposed collection system will be designed to be 85 to 90 percent effective through a system of vertical wells, horizontal trenches, and a huge "wet vac" that creates negative pressure to draw gas into the pipe. Wells will continue to be replaced in the system. Although the landfill has a 20 to 25 year project life, the renewable energy plant will have a 40-year life expectancy as gas will continue to be generated after the landfill is closed.

The CV for David Bibian, mechanical engineer for Jacobs, was accepted into the record as an expert witness (motion made by Mr. Campagnone and seconded by Mr. Breckel). Mr. Bibian indicated that the objectives of the gas processing plant are to remove moisture, treat for hydrogen sulfide removal and remove siloxanes. In response to Mr. Campagnone's question, leak detection and monitoring in enclosed areas will be conducted in accordance with EPA standards. In response to Ms. Passarelli's question, the detection limit will be set for safe and proper action or response such as closing a perimeter. In response to Mr. Breckel's question, monitoring will be wired into the system for continuous review by system operators. All hydrogen sulfide will be handled within a closed building and within water-tight containers. No sulfur purchaser (such as agricultural use) has been identified as production is two years away.



In response to a question by Mr. Breckel, no dust will be created for dispersion to the atmosphere; siloxanes will fall out as glass in the vicinity of the flare. In response to a question by Mr. Breckel, no stockpiling of gas will be made. In event of a fire or loss of power, the gas collection system would shut down with no resultant build up of pressure in the landfill. In the event the plant is not in operation, gas will be flared off. Gas will be compressed for transmission to the turbine plant. Steel underground pipes will have cathodic protection.

The turbine plant will have a closed loop system with temperatures varying between 60 and 120 degrees. This system will be topped off only as necessary (99 percent reclaimed). Mr. Licht indicated that the Providence Water Supply Board has approved a million gallon per day increase for the Town of Johnston, including 700,000 designated to Ridgewood. In response to Mr. Verardo's question regarding who will be responsible for putting in a new water line, Mr. Licht indicated that it is to be decided what if any upgrade is required. Engineers will be addressing adequacy of water service for fire suppression.

The substation and transmission lines will be designed and constructed by the applicant to National Grid standards with ownership transferred to National Grid. A sublease would be issued to National Grid for an easement for the substation. In response to Mr. Campagnone's question, the plant will generate sufficient electricity to meet the needs of approximately 30,000 homes.

Mr. Bibian addressed the Industrial Performance Standards.

- Operations will be in compliance with town noise regulations. Noise modeling will be completed when equipment is purchased. They will conduct a field test to guarantee all noise generated is in compliance with regulations at the property line.
- Vibration is not an issue as no pulsating equipment is required.
- The DEM Air Quality Permit to Construct and EPA's Permit to Operate (requiring monitoring and tests prior to operation) will assure that smoke and air quality issues are addressed. Periodic monitoring by a third party on a regular basis will also assure that adequate air quality is maintained. In response to Mr. Verardo's question regarding what will people see at the plant, Mr. Bibian indicated that the FPL plant is 20 times larger than the proposed plant and that a cloud will only be generated if it is humid or extremely cold.
- Site will be sewerred with all flow discharged to the RIRRC for pre-treatment to meet their permit requirements. Town and RIRRC are currently working with the Narragansett Bay Commission for sewer service that is anticipated to be operational in 2011 or 2012.
- Heat and glare will be reduced compared to current situations as flares will be enclosed.
- Radiation is addressed in the EMF study which meets National Grid's standards.
- Fly ash is regulated through the DEM air quality permit and meets all requirements without a variance. DEM also regulates the adjacent wetlands. Air quality will be enhanced with the elimination of sulfur.

Mr. Bibian addressed points in Richard Hittinger's peer review which he found extremely beneficial and constructive in developing clarity for this project. In response to Mr. Verardo's question regarding what people in town will hear from the plant, Mr. Bibian explained that



residents will not notice any changes from background and that this would hold for night operation when background noises are lower. The closest resident is 1000 feet away with another neighborhood 1,500 feet away.

Following a five minute recess, Richard Hittinger from Alliance Environmental Group LLC was sworn in as the peer reviewer for the Planning Board. Mr. Hittinger's curriculum vitae and a summary of his findings dated 10/5/10 were distributed and entered into the record. Mr. Hittinger indicated that the project would have a net positive impact on air quality in the Johnston area, however it is important that the design, construction, and operation of the facility are done correctly. Areas of concern include:

- Show that the gas treatment plant will not cause odors from the process or from air emissions from the flare.
- Show sufficient design information on the pipeline to document safety relative to leaks. Gas pipeline should be built to exterior standards.
- Provide documentation that all noise will meet Town requirements.

Applicant representatives explained that all odor-producing processing would be conducted in enclosed spaces. Merger of lots is being conducted to define clearly the lot line. This is important in determining compliance with the noise regulations. Air quality offsets have been purchased as required for DEM's air quality permit. These were purchased in Southeastern Massachusetts as no offsets were available in Providence. In response to a question by Mr. Verardo, Mr. Kirk indicated that the Cameron System has been used in Michigan for hydrogen sulfide removal and moisture control with good results although they are still tinkering with the process. The sulfur centrifuge will be enclosed to control odors with an odor control filtration system. Burning siloxanes in the flare will cause silica to fall out either within the contained flare or on the immediate ground. Mr. Bibian indicated that this will not be a dust and would be collected as part of the Operations and Maintenance plan. This is not a regulated material by EPA (not like asbestos). Siloxanes will be concentrated but that facilitates its removal compared to current conditions. Siloxanes will either fall to the ground or form a crust around the rim of the flare. Mr. Kirk suggested a mottled muddy green color for the stacks. Mr. Campagnone and Mr. Breckel suggested industrial colors or gray to reflect the existing industrial corridor. Town Planner to approve the stack colors. Mr. Hittinger suggested that the gas line between the two plants be constructed to ASME standard 8-31.8 (exterior).

The chair opened the floor to public comment. Mr. Justin Parrillo, 212 Elmdale Road, North Scituate, questioned the quantity of water required per day for the cooling towers. The applicant's representative indicated 10 to 15,000 gallon per minute and that 700,000 gallons per day would be required on the hottest day. Mr. Parrillo questioned if sufficient water would be available from Providence Water Supply Board if water use restrictions are implemented in case of a drought. Mr. Licht said that availability of water has never been an issue during hydraulic modeling. Mr. Parrillo indicated that pressure at the FPL plant is sufficient but a minimum. Mr. Licht indicated that Ridgewood would purchase water at the same rate as any customer in town. To the extent that any system upgrades are necessitated by Ridgewood to upgrade the system, they are working with the Town and this will be addressed at the Preliminary Plan review.



Mr. Sasa made a motion that the hearing had been held, seconded by Mr. Breckel. Motion carried.

In discussion by the board, Mr. Sasa indicated that the board is looking for the best interest of the town and discussed the PILOT payment, and potential costs to the town to provide upgraded service. In response to his question regarding how much sulfur will be generated, 1.2 tons/day of sulfur cake (60 percent water/40 percent sulfur) will be shipped out once per week in water tight secure containers. Mr. Licht indicated that the sewer effluent will meet the RIRRC discharge requirements.

Following a closing statement by Mr. Licht, a motion for a five minute recess was made by Mr. Sasa, seconded by Mr. Breckel, and approved. Following the recess, Mr. Breckel made a motion, seconded by Ms. Aguiar, to approve the Industrial Site Plan with the following stipulations:

1. Approval of the Industrial Site Plan should in no way be construed or interpreted as approval or support of the Preliminary Plan. Any building permit issued for foundations based on Industrial Site Plan approval is conducted at the applicant's own risk.
2. Merger of lots for each of the two sites is required for compliance with Town of Johnston Zoning dimensional requirements and SBC-1 2010.
3. Stormwater management plan and Soil and Erosion Control Permit are required for any site work.
4. Applicant must satisfactorily address issues relating to visibility and safety along Shun Pike from the "steam cloud," see #17, below.
5. The color of flare towers, turbines and stacks shall be specified by the Planning Department.
6. Noise emitting operations and maintenance procedures shall be limited to hours between 7:30 AM and 6:00 PM.
7. Gas leak detectors shall be installed in processing buildings. This would preferably be a continuous monitor, but if that is not practical a program shall be initiated with semi-annual survey monitoring with records maintained at the facility. These records shall be available for review by Town staff.
8. Semi-annual leak detection shall be required of all exterior gas piping, including subsurface piping along Shun Pike to assure there is no release of gas affecting the surrounding properties. Records of survey monitoring shall be maintained at the facility and available for review by Town staff.
9. A health and safety plan shall be filed with all appropriate agencies.
10. All excavation materials shall be disposed in accordance with state and federal regulations.
11. Formation of elemental sulfur has the potential to create strong odors. Design and procurement documents shall stipulate that the operation of this unit not cause objectionable odors beyond the property line. Sufficient documentation shall be provided in this regard to



the Building Official prior to issuing a building permit for the Gas plant.

12. Applicant shall provide a letter of assurance from the equipment manufacturer that the Town noise standards can be met as a condition for Final Plan approval. Noise modeling shall be conducted as a condition for Final Plan approval. A noise field study shall be conducted to demonstrate that town standards have been achieved for the Certificate of Occupancy.
13. Design and specification of equipment shall indicate that said equipment must be in compliance with the Town's noise standards at the property line. Sufficient documentation shall be submitted to the Building Official indicating that all equipment shall operate in compliance with the Town's noise standards prior to issuing a building permit for either the gas or electric plant.
14. Ridgewood shall provide documentation that their vendors will agree to meet the requirements imposed by RIDEM on the "Regen Flare" relative to emissions and destruction rate based on the anticipated input of contaminants into the flare. Ridgewood must provide sufficient information to document that this process, including the burning of the desorbed material in the flare, meets federal and state requirement. Documentation must be on file with the Building Official prior to issuing a building permit associated with this equipment.
15. Ridgewood shall keep records of any time an emergency steam release creates noise levels that exceed Town ordinance. Plant operator shall immediately report such an event to the Fire and Police Departments.
16. Ridgewood shall conduct a plume study from the cooling tower during final design. The plume study shall be reviewed and approved by the Town Engineer with input from the Building Official, Town Planner, and Fire Chief. The Town Engineer reserves the right to hire peer review at the applicant's expense to document the plume's effect on health and safety. Approval indicating that no adverse health and safety impacts are anticipated shall be filed with the Building Official prior to issuing a building permit for the cooling tower.
17. Ridgewood shall provide documentation that projected use of 700,000 gallons of water per day is necessary and that water conservation was considered prior to arriving at this demand.
18. Ridgewood shall provide design details regarding the proposed high pressure gas pipe from the gas cleaning facility to the turbine facility. Said pipe shall be designed in accordance with all applicable state and federal codes. Gas pipelines shall be designed to exterior gas transmission and distribution system standards.
19. Applicant shall file an operation and maintenance plan with the Building Official prior to issuing a building permit.
20. Sulfur cake handling systems shall be enclosed and odor control carbon filters shall be installed.
21. In the event that there is an annual license required, the Town shall have the right to inspect the facility.



22. The town waives the right for a performance bond at this time but retains the right to require this during further review stages.

Motion passed 7-0.

Mr. Licht requested that all testimony of the prior hearing be included as an exhibit for the Preliminary Plan hearing and also requested that the Preliminary Plan be continued until the November meeting.

V. Administrative Report & Special Items

The planner's report was submitted.

VI. General Business

The next Planning Board meeting is scheduled November 9, 2010 (rescheduled from November 2, Election Day).

VII. Adjournment

The October 5, 2010 meeting adjourned at 11:20 p.m.

Lauren A. Garzone, SECRETARY