

TOWN OF JOHNSTON



PLANNING BOARD & ZONING BOARD OF REVIEW

100 IRONS AVENUE, JOHNSTON, RI 02919
TEL.: (401) 231-4000 FAX: (401) 231-4181

JOINT PUBLIC HEARING

Narragansett Electric Company d/b/a National Grid
Rhode Island Reliability Project

MINUTES

May 19, 2009

The Planning Board and the Zoning Board of Review of the Town of Johnston held the first joint public hearing in connection with the Rhode Island Reliability Project on May 19th, 2009, at the Johnston Senior Center. The public was invited to attend to voice concerns or ask questions regarding the project.

The public hearing was called to order at 7:05 p.m. Board members present were:

PLANNING BOARD: Thomas Breckel, Michael A. Campagnone, Lauren A. Garzone, *Secretary*, Peggy A. Passarelli, Mohamad Yaser Sasa, *Vice-Chair*, and Anthony Verardo, *Chair*.

ZONING BOARD: Kenneth Aurecchia, *Chair*, Costanzo Caparrelli, Sr., Richard Fascia, *Vice-Chair*, Bernard Frezza, Douglas Jeffrey, *Secretary*, and Anthony Pillozzi.

Also present for the Town of Johnston were Joseph Ballirano, Esq., *Assistant Solicitor*; Timothy J. Chapman, Esq., *Assistant Solicitor*; William J. Conley, Esq., *Solicitor*; Makram H. Megalli, PE, *Director of Public Works*; W. Mark Russo, Esq., and Moshe S. Berman, Ferrucci Russo P.C.; and Rian Smith, *Assistant Planner*. Present for National Grid were Peter V. Lacouture, Esq., and David J. Beron, PE, PMP, and Susan E. Moberg, PWS, Vanasse Hangen Brustlin, Inc.

Mr. Conley explained that the hearing's purpose was to present the project's impact on the Town of Johnston (TOJ). Mr. Russo would summarize the process. Traffic to be presented on May 27. Purpose to answer questions and hear public comment about information and evidence provided by National Grid (NG). Boards to deliberate on advisory opinion at conclusion.

Narragansett Electric Company, d/b/a National Grid (NG), proposed the implementation of the Rhode Island Reliability Project (RIRP) involving the relocation of two existing 115kV transmission lines, and construction of a new 345kV transmission line within NG's right-of-way (r-o-w). R-o-w contains high voltage transmission lines and runs through numerous lots in TOJ assessors' plats 29, 30, 31 43, 44, 50, 51, 53, 54, and 55.

Mr. Russo cited experience with energy projects and reviewed NG's proposal. He outlined the process of preliminary decision and order. The *Energy Facility Siting Act* consolidates state and local governmental regulatory authority under the Energy Facility Siting Board (EFSB), a 'super licensing board.' EFSB does not require special use permits and variances; instead, advisory



opinions from all usual municipal sources on use/variances. Without this act, NG would have to get approvals by these boards.

Issues: Would a waiver from certain laws be justified despite what TOJ said, or to make project comply? What constitutes acceptable harm to environment? Will proposal enhance socio-economic fabric of state—and meet local regulations? Will construction and operations proposals be consistent with TOJ Comprehensive Plan?

Workshop with Building Official to determine issues to be enforced if not for act. Advisory opinions due and public hearing with EFSB for residents' questions. (NG answer not required.)

What would be requested in zoning petition? P. 5: compatible with neighboring uses. Examples of issues and how they affect property values; NG has not hired real estate expert (to be available on May 27th). Concerns with electric and magnetic field (EMF). NG not finished with analysis. Would affect setbacks.

Right-of-way (r-o-w) granted by landowners some time ago; certain areas dedicated for access and repair. Distance from underground gas lines. Detailed engineering plans required; NG did not provide. Job is to help ascertain neighboring uses.

Public outreach: mailing to abutters and public officials by Mayor's office and Ferrucci Russo.

Mr. Verardo: historical weight of advisory opinions by boards? As in case of N. Kingstown, opinions can carry a lot of weight if done properly. Taken seriously and agreement on many issues. Have to slug away and advocate. System not designed for benefits of cities and towns. Avenues of appeal available.

(Mr. Caparrelli recused himself.)

Mr. Lacouture submitted certified mailing receipts for NG. New 345,000' voltage line built without acquiring more property. Moving existing lines along existing corridor to leave space in middle. 21 ½-mile project from N. Smithfield (West Barnum substation) to Warwick (Kent county substation). Relocations and upgrades also. Special use required for B-3 zoning district (none for utilities) and dimensional variances for towers.

David J. Beron, PE, PMP, Project Manager for Transmission, *unanimously accepted as NG expert witness*. NG USA Service Co. is a subsidiary providing administration services like engineering, accounting, legal. Résumé requested.

Project report proposing volt transmission line *unanimously accepted as NG Exhibit B*. System reliability concerns (extracted from environmental report) re: reliability problems in southern New England (NE). ISO New England spearheaded study of relationship of transmission network with focus on southern NE by NG and Conn. Overarching problem is E-W / N-E constraint. Main lines N-S; therefore power unable to move E-W. Collection of four solutions to solve all five problems. Comprehensive geographical solution needed.

[1] RIRP report on RI low voltages for area contingencies *unanimously accepted as NG Exhibit C*. Criteria and performance standards project must meet. If out of service, system to accept contingency and still perform to standards. Blue/green = system normal. Dark blue = low voltage areas. Over ¾ of RI subject to low voltage/blackout conditions. Report on overhead wire voltage conditions *unanimously accepted as NG Exhibit D*. Existing transmission corridor 5.5 miles in TOJ. 1950's r-o-w occasionally 250' wide. Schematic view looking south (Figure 4-2, sheet 1/5) *unanimously accepted as NG Exhibit E*. New lines are two on left/east side, 25' feet from edge of



r-o-w. Closest wire not moving closer. Gas lines present in TOJ r-o-w, shifting from east to west. TVA owns gas line; agreement collocating within corridor; has been notified; no reason to move.

Schedule: licensing and permitting; construction, mid-2010; service, summer 2012. 18-24-month construction timetable. If couldn't construct, subject to potential reliability problems. NG community outreach: five problems; started communicating with state and local leaders 2 years ago. Open houses to meet with public; municipal education seminar; presentations, to TOJ Town Council; knocking on doors of abutters to pass out information and listen to comments. To be continued throughout life of project. Closest resident to r-o-w, 100+'. Further south, more densely developed, closer. (Will be going near Greenville Avenue, Poppy Hills.) Requested date of open house; public notice; mailing of project fact sheets within 2-300' of project.

Questions on experience in NE, underground lines. 4 years, under certain conditions, had to consider underground, only if not feasible overhead. Because of regional benefit, cost spread across all ratepayers in NE, based on percentage of entire load by state. If NG to take expensive and extensive step of going underground, ISO would not allow cost to be socialized, forced to be born by RI residents. Cost differential: \$415 million underground v. \$245 million overhead. Performance issues—repair time is hours v. weeks/months. Constructing substation for equipment also issue in transition. Easement already fully cleared. Dimensional variance for height, not distance from edge. Laid out as though houses directly abutting easement, 25' from nearest pole. No additional tree-clearing (Sheet 2/5). EFSB governs clearances. From current 6 transmission lines to 5; from 3 circuits to 4.

Single page included with EFSB notice to abutters (*unanimously accepted as NG Exhibit F*).

Standards for granting relief: 1st dimensional relief and use variance due to unique characteristics of structures involved. National Electric Safety Code (NESC) governs aboveground between circuits themselves. 450-600' optimum design, necessitated by NESC requirements. Spans: overhead can expand resources areas like wetlands, cultural resource, as couldn't with underground. Existing poles lined up along r-o-w vary in placement, parallel to existing 345kV line, unless impacts wetland or cultural resource. Minimum distance required from private property. Wires move ~5' with wind; minimum width between poles from circuit to circuit varies by voltage. To be provided next week. Serviced by bucket or crane, not ladder, to climb steps ~20' aboveground. All labeled with safety warning signs.

[2] Hardship not a result of prior action of applicant. Providing firmer and more reliable electric supply to RI to satisfy reliability standards. [3] Least relief necessary: possible without high clearances, all configurations to require variances. [4] More than mere inconvenience—still exposed to potentially unreliable power. NG has obligation to provide power to residents.

[5] Zone B-3 if use variance not issued; 2 1/2-mile project would create gap in middle, creating extreme hardship. Substantially serve public welfare: aimed at reliability of power to homes, businesses, hospitals, schools, etc.—critical infrastructure. Inimical to general public health, safety and welfare of community; strictly governed by NESC; project team examining environmental aspects, code clearance requirements, and minimizing environmental impacts. Health and safety protected by code. In other states' r-o-w's—Plainville w/ 2 x 245 and 2 x 215v power lines—impact... none. In place since 1980s. Discussion of whether study of states with similarities to RI can be presented to boards as precedent. Department of Health asked to provide advisory opinion, also due June 15. Still under review. Study reviewing effects of EMF on



health. Connecticut law “softened” on forcing lines underground because of escalated costs to state ratepayers. Consensus as to health as paramount.

Costanzo Caparrelli, abutter: questioned why RIRP before boards without decisions from other entities—health department. In EFSB process, independent advisory opinions considered and weighed simultaneously. Determined by state, not by NG. Health issues—case in Wales. Summary of current status of health research on EMF (Appendix B). No causal relationship established. Mathematics of EMF before and after/chicken and egg. Geological and subsurface testing required to design. Easement provides right to do so. Not building, just archeological testing, soil borings, etc., vehicles providing low shock. Tripling power and already experiencing problems. TOJ hearing is opportunity for input. Not a foregone conclusion. EFSB and Public Utilities Commission have right to not allow project to proceed. Requesting more research.

Mr. Pilozzi: Wales, 1% difference in childhood leukemia cases. Panel of experts to examine; not qualified as EMF expert, willing to answer. Next meeting will try to provide EMF expert. Within 200 meters, 70% increase in leukemia. Assessment by World Health Organization of cancer, conducted by convening panels of experts look at all studies, weigh evidence of body of research for last 40 years. Direct relationship not established. If expert not available, perhaps date of meeting to be moved. From Health Department? Look at last report/case study? Better than none.

Mr. Russo: motion filed to extend deadline. Per NG, EMF analyses not yet complete. Environmental report filed last September/November received by TOJ late this afternoon. *Motion to obtain information on health studies and to follow-up with Mark Russo and Public Works Director—well in advance of next meeting.* To be checked with expert; copies of Appendix B required to back up numbers in report and with Health Department.

Cross-section from Smithfield 5-mile r-o-w with davits for wires through entire town, aerial photos, and NESC calculations. Regional benefit, 6% of cost, not buying additional land, would buy more to increase distance from edge. Cost analysis of widening r-o-w.

Mr. Beron: EMF have magnitude and direction; able to optimize wire arrangement to cancel. Some fields go up, some down, no dramatic increase the higher from ground, and thus further from source. Net reduction in fields?

Mr. Aurecchia: People, not animals, demonstrated effects of power lines.

Kevin Sarli, abutter, Greenville Ave.: confirmed proposed changes and thanked boards for work for residents.

Mr. Megalli: Goes beyond health effects, EMF study. Visibility to enjoy views. What is safe distance to build from easement? Can NG provide list of easements in TOJ to update maps beyond project? What used to determine safe distance when issuing permits? Sought for many months by Building Official; NG response, “every case is different...” Expert to appear next week. Designed for structures to be built right on edge. NG will follow up. Boards asserted that all expert witnesses work for electric company—requesting independent expert.

Costanzo Caparrelli: Cited arms hanging off, 38’ height of lines; height varies. Changes in TOJ requested.

Petition for extension to hire expert to look at transition with EFSB. Hearing requested. Time frame determined by statute. Towns don’t have enough resources. Good to have own experts, no time to review. Impartial? *Motion to provide vitae in advance.* NG objections to 1–2 month



extension questioned. Zoning application filed in first 2 weeks of November. Mr. Jeffrey: decibels of 'hum' increase with greater power. Under normal conditions, shouldn't be audible. If so, NG troubleshoots. Affects central nervous system, promotes anxiety. If Zoning Board doesn't grant variances, EFSB can just override; EFSB members named by statute—chairman, Public Utilities Commission; Director, Statewide Planning; Director, DEM. Separate wetlands application to DEM.

Susan E. Moberg, PWS, *unanimously accepted as NG expert witness; curriculum vitae accepted as NG Exhibit G*. VHB project manager—identifying environmental conditions within and adjacent to r-o-w for environmental report. Including land areas within 2,500' on either side of 5½-mile TOJ r-o-w. Majority developed, cleared of mature trees; shrubs and herbaceous plants remain, as well as streams, ponds, wetland, agricultural lands, and geological landforms.

Potential impact analysis focused where construction to take place in r-o-w. Significant natural features within study area identified. Construction impacts: relocation of two lines, construction of new line; equipment. New towers to be built, therefore excavation, maintenance on existing access roads, new temporary access routes. No additional clearing, just temporary soil clearings. Disruption of wildlife in open spaces with shrub cover deemed "temporary" based on studies.

Long-term permanent impacts on wetlands; some disrupted already, some to be removed. Wetlands present near 49 of new structures in all 5 communities. Minimizing permanent impacts: laying down swamp mats (timber cabled together) as best practice. DEM inventory of endangered/threatened species referenced as indicated by correspondence. US Fish & Wildlife Service identified some species; state historic per DEM. Two species within TOJ: snake and moth, both mobile (unlike plants). Also extensive staff survey and observations of breeding birds and species not already identified. Helped design project to flag areas for construction crews.

DEM permits not applied for. Ms. Moberg stated impacts fairly minimal. Question on rush for advisory opinion if DEM permits might take years. Placement of swamp mats to access new structure. Other occurrences during and after: temporary access for equipment arranged around structure site; positioned for excavation, foundation poured, structure assembled, moved to another site in r-o-w. Soil smoothed out, seeded, erosion controls applied, area allowed to restore to pre-construction condition. 720 lines total with 49 within wetlands; 123 within wetlands buffer zone in state regulated areas. Detailed impact analysis. NG measures to prevent erosion based on best management practices: swamp mats, hay bales staked around perimeter; silt fence possible, naturally eroding mulch logs/tubes deployed prior to construction to be left in place.

Environmental monitor in place throughout project construction three days a week; otherwise coordinating with supervisor as condition of permit and submitted monitoring reports to DEM. Ensures additional measure if necessary and no violations to permit conditions. Construction impacts on abutters: not from public accesses; erosion problems are environmental, i.e., sediment in stream; no planned activities to affect quality of drinking water/wells. Possible accidental release of fuel; environmental guidance document governs materials spilled on site. Rock removal via quarry or pneumatically, no blasting. Restrictions on fueling vehicles: not within wetlands or regulated buffer zones; allowed within r-o-w but not regulated wetlands areas. NG practice to remove potentially interfering trees: cut down if over 10' tall when mature, and re-cut every 3 years. Effort to leave rest of vegetation undisturbed. Developed v. new r-o-w: minimal additional environmental impacts; new, much greater impact on environment than with existing.

Compliance with standards:



1. Environmentally compatible with neighboring properties—no direct impacts intended, hope to avoid unintended impacts.
2. Special-use permit for orderly growth and development of TOJ: smart growth considers existing v. new and sustainable land-use practices, both individual and commercial.
3. Best practices and procedures to minimize impacts on TOJ. TOJ approval to be sought if soil erosion affecting water supply: no activity intentionally to interact with surface or groundwater; indirect to effects to be managed.
4. Septic disposal: none
5. Wetlands protection: DEM permit and Army Corps of Engineers—in turn from USFWS, National Marine Fisheries, EPA, NIT.
6. Traffic: working with DPW in each municipality; if permits required, traffic plans to be submitted. DOT permits required for crossing state highways. No traffic impacts after construction.
7. Safety: none other than EMF issues.
8. Circulation: no undue equipment required that would impact traffic following construction.

Mr. Verardo: no reason not to extend if permitting process so extensive.

Question as to where animals go—mammals, amphibians, birds, deer, mice, fox, coyotes, fisher cats. Two levels of endangered species: (1) state—process amorphous and variable; RIPDES permit not required because DEM level of review higher. (2) USFWS for federally listed endangered species, of which there are none.

Mr. Campagnone: either N–S or S–N lines have to be taken out of service, one at a time. Construction limited to spring or fall windows. Outage planning. Roadway/aviation hazards require construction of wildlife passageways. No experience with herding issues resulting from construction especially in construction seasons.

Mr. Russo requested presence of witnesses at May 27th meeting.

May 19, 2009, Joint Public Hearing on Rhode Island Reliability Project continued to May 27th, 2009.

Lauren A. Garzone, SECRETARY
PLANNING BOARD

Douglas Jeffrey, SECRETARY
ZONING BOARD OF REVIEW