

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS  
ENERGY FACILITY SITTING BOARD

In re: Relocation of Transmission Lines :  
in Providence and East Providence :  
(E-183 115Kv Transmission Line : Docket No. SB-2003-01  
Relocation Project – AC I-95 Relocation :

**FRIENDS OF INDIA POINT PARK'S *AMICUS CURIAE*  
BRIEF IN SUPPORT OF THE CITY OF PROVIDENCE'S  
MOTION TO EXTEND THE TIME FOR BRIEFING**

The Friends of India Point Park (the "FIPP"), a Rhode Island non-profit corporation, submit the following brief in support of the October 10, 2017 Motion of the City of Providence ("Providence") to Extend the Time for Briefing in the above matter.<sup>1</sup>

As will be discussed, granting the Motion to Extend will enable Providence to submit a detailed proposal (the "Partial Underground Alignment Proposal") to the Board that is both: (1) within the terms of the May 25, 2004 settlement agreement (the "Settlement Agreement") between the Narragansett Electric Company, now d/b/a National Grid ("NG"), Providence, the City of East Providence ("East Providence") and the Rhode Island Attorney General (the "AG"); and (2) a dramatic improvement over the proposal presently being considered by the Board, i.e., the "Bridge Alignment South" proposal.

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<sup>1</sup> Although the pressing time constraints preclude the submission of a separate motion either for leave to submit this *amicus* brief or to intervene as an interested party, nothing in the Board's Rules of Practice and Procedure suggests that the Board lacks the discretion to consider such briefs in the same manner as the Superior and Supreme Courts. See *State ex rel. Montaquila v. Avery*, 90 R.I. 305, 157 A.2d 886 (1960). In addition, the FIPP is a permissive intervenor under the Board's Rule 1.10(b)(2) as it: (a) has "[a]n interest which may be directly affected and which is not adequately represented by existing parties and as to which petitioners may be bound by the Board's action in the proceeding." *Id.*; and/or (b) its participation is "in the public interest." *Id.* at subsection (b)(3).

## I. ARGUMENT

### 1. **The Partial Underground Alignment Proposal is Within the Terms of the Settlement Agreement**

Little time need be spent rebutting East Providence's claim that the Partial Underground Alignment Proposal "falls outside of the definitions set forth in the Settlement Agreement and therefore, cannot be considered by the Board." *See* October 10, 2017 Position of the City of East Providence Regarding the City of Providence's September 25, 2017 Alternate Overhead Alignment Proposal in Relation to the Settlement Agreement at 3.

In fact, the Settlement Agreement originally contemplated an "Underground Alignment." *See id.* at § 1.5 (defining the term). Moreover, while the Partial Underground Alignment Proposal is not explicitly listed in Section II of the Agreement, East Providence's overly technical reading of the Agreement is belied by the fact that Providence, NG and the AG all recognize that it is within "the spirit of the Agreement." *See* October 10, 2017 letter from Deputy City Solicitor Southgate to the Board at 1; September 28, 2017 letter to Board from NG Attorney Lacouture at 1; and October 10, 2017 Response of the Department of Attorney General to Request of Energy Facilities Siting Board at 1.

### 2. **The Partial Underground Alignment Proposal is a Dramatic Improvement Over the Bridge Alignment South Proposal**

The proposed South Bridge Alignment would move the high-voltage overhead waterfront power lines from the soccer field in India Point Park to the popular George Redman Linear Park over the Seekonk River, adjacent to I-195. In the process, overhead power lines would be made much more visible to traffic on this major gateway to the City. This would be bad for Providence and for the state as a whole as it would:

- (a) continue to obstruct water views along the I-195 entrance to the City which is used by 60 million cars a year, and discourage more of the 10 million people who travel through Providence on their way to the Cape and the Islands from stopping in Rhode Island;<sup>2</sup>
- (b) prevent the significant scenic enhancement of our signature shoreline at the Head of the Bay with its Newport ferry landing and waterfront parks at India Point, Bold Point, and the George Redman Linear Park bridge; and
- (c) surround the renovated Hilton Garden Inn on all sides of its water views, obstructing all of its vistas of the City's shoreline.

As the Board is well aware, advisory opinions, resolutions, and letters from two State agencies, the state House of Representatives, as well as five government agencies in Providence and East Providence have urged burial of the waterfront wires,<sup>3</sup> and the Partial Underground Alignment Proposal is the last best hope for doing so. Thus, in the Board's 2004 Order approving the Settlement Agreement, the Board made crystal clear that the "parties have agreed that the E-183 Line will be relocated underground unless it is determined that it is not feasible." *Id.*

After fifteen years of discussion and after \$18 million has been raised to enable the burying of the high-voltage waterfront power lines, the Board should not respond to the pressure to take some action by approving the South Bridge Alignment Proposal, and thereby preventing the state from obtaining the lasting benefits of increased tourism and economic development that other mid-size cities like Chattanooga, Louisville, and San Antonio have reaped by burying waterfront power lines. (*See* economic benefit fact sheet attached as Exhibit A). The alleged benefits of the South Bridge Alignment – *see* October 12, 2016 Joint Report and Motion of NG

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<sup>2</sup> If just 1% of those who speed by were to stop and spend \$100 in the state, \$10 million would be added to the state's economy every year.

<sup>3</sup> Indeed, the state Department of Environmental Management stated in 2004 that overhead power lines "diminish... the recreational and aesthetic value" of India Point and Bold Point Parks, and the Providence Parks Department Deputy Superintendent wrote in 2003 that the power lines "leave the psychological perception that India Point park is merely a Narragansett Electric right-of-way."

and East Providence at 2 – pale by comparison to what would be the loss of a once-in-a-generation opportunity. *See* October 12, 2016 Joint Report and Motion of NG and East Providence at 2.<sup>4</sup>

Moreover, Board approval of the South Bridge Alignment without an evidentiary hearing would violate state law and the Board’s Rules of Practice and Procedure. NG’s 2003 application in support of moving the E-183 line makes no reference to a South Bridge Alignment, and thus no “detailed description and analysis of the impact of the project on the physical and social environment” for the South Bridge Alignment was submitted, as required by EFSB Rule 1.6(f). In addition, the 2004 Settlement Agreement makes no reference to any such analysis. And the Board’s statutorily-required finding in its 2004 order that “the alignments as provided in the Settlement Agreement will enhance the socio-economic fabric of the State and minimize the impact on the environment”<sup>5</sup> is fatally out-of-date.<sup>6</sup>

Surely, state law was not intended to countenance action based upon information that is more than a decade out-of-date. Yet, as the FIPP pointed out in 2017 and as former state Attorney General Patrick Lynch noted in his December 16, 2013 letter to the Board (*see* attached Exhibit B), the waterfront was a very different place in 2004, i.e., there was no George Redman Linear Park, no Newport ferry landing, no upgrading of India Point Park or the adjacent Hilton Garden Inn, no concert venue at Bold Point Park, no effort to market I-195 parcels in Providence

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<sup>4</sup> In fact, in states like California, Colorado, and South Carolina, investor-owned utilities have been burying strategically located power lines for decades. And in England, it has been widely reported that National Grid/UK – the profitable parent company of National Grid/RJ – will spend more than \$1 billion to bury lines in national parks and other important scenic areas to reduce their impact on “people, places and the environment,” and to insure that “the mistakes of the 50s would not be repeated.”

<sup>5</sup> *See* RIGL §§ 42-98-11 (b) (3) and 42-98-2 (3).

<sup>6</sup> Indeed, Board Member Coit expressed concern over the environmental impact of the South Bridge Alignment because of “some of the ways the landscape has changed in the last 14 years,” noting in particular the building of the George Redman Linear Park over the Seekonk River. *See* transcripts of EFSB meeting on 2/16/17 at 13 and of the EFSP hearing on 2/6/17 at 45.

with water views obstructed by overhead power lines, and little or no active effort to develop East Providence waterfront parcels (with views to be marred by overhead wires).

**3. The Partial Underground Alignment Proposal is Feasible and Balancing the Comparatively Insignificant Delay Against the Significant Benefit to the Public Makes Clear that the Motion to Extend Should be Granted**

Although all are in agreement that this matter should be resolved as quickly as possible, it also should be emphasized that, as noted in Providence's Motion to Extend, the Partial Underground Alignment Proposal was not addressed until after a meeting with Mayor Elorza on September 22, 2017. *See id.* at 1-2. The Proposal is the most feasible and least expensive choice remaining, as the FIPP argued in its March 1, 2017 letter to the Board (which was also sent electronically to the Parties via the listserv (and a copy of which is attached as Exhibit C), and there is no reason to believe that there are technical issues regarding the Proposal that cannot be resolved expeditiously.

Burying the lines between the Providence and Seekonk Rivers would employ the conventional open trench method known as "cut-and-cover." The FIPP's consultant, Rick Ponti ("Ponti"), a Stantec engineer with 40 years of experience, estimates that cut-and-cover trenching between the rivers would cost approximately \$1.5 million for every 1,000 linear feet, or \$3.75 million to cover the estimated 2,500 feet between Temporary Pole #3 and the western bank of the Seekonk River. *See* VHB's 2007 map and Ponti's October 10, 2017 email to FIPP Co-Chair David Riley, copies of which are attached as Exhibits D and E.

Ponti also has opined that a transition station at Temporary Pole #2 (where NG presumably holds an easement) could be protected from salt runoff from I-195. That lot appears to be about 20,000 square feet, twice as large as the 10,000 square feet (100 x 100 ft or 50 x 125ft) footprint that NG has said is needed for a transition station. Ponti has indicated that a

transition station would cost about \$1 million, and that the auger bore or pipe jacking of the line under I-195 (from Temp. Pole #2 to Pole #3) would cost approximately \$750,000 to \$1 million.<sup>7</sup>

If the lines are buried under the Seekonk River – which Power Delivery Consultants (“PDC”) stated in its April 10, 2015 report presents “more favorable geotechnical conditions for HDD [Horizontal Directional Drilling] installation” than the Providence River – then a second transition station would not be needed until the lines emerge from underground in East Providence, which has planned a land swap for a transition station there. (See the October, 2017, draft Stantec report for a review of earlier consultants’ studies, attached as Exhibit F.) On the other hand, if the lines are not buried under the Seekonk River, they could still be removed from public view, which would benefit both Providence and East Providence, by attaching them to the underside of the George Redman Linear Park bridge, which consultants PDC and Maguire concluded is “doable” in testimony before the EFSB on September 26, 2017. If the lines are attached underneath the bridge, a transition station near the western bank of the Seekonk River would be needed.

We urge the Board to grant Providence’s Motion to Extend and enable the parties to establish a common set of facts and assumptions about feasibility, cost estimates and funding for partial burial which the Board and the Parties can rely on as they move forward toward a solution. We assume that this effort will include comparing Ponti’s analyses with those of Power Engineers (“Power”) in its October 21, 2014 report on undergrounding, and those of other consultants who have reviewed Power’s work. It is difficult to see how the Board can make an informed decision about partial burial without establishing such a common set of facts and assumptions, which has been lacking in this process.

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<sup>7</sup> Ponti is recovering from by-pass surgery but has indicated to the FIPP that he will be ready and willing to travel to Providence from his New Hampshire home within two weeks.

The lack of a common set of facts applies to both feasibility and funding for burial. Four consultants, including Stantec, have found that burying the lines is feasible (*see* statements cited in the draft Stantec report at 5 and 6). Yet NG has consistently conflated the risks of burial with lack of feasibility. Similarly, the PDC and Maguire bridge consultants found that attaching the lines to the Seekonk River Linear Park bridge is “doable”; yet at the same EFSB hearing on September 26, the Parties contradicted the consultants and declared that the under-bridge alternative is not feasible.

The lack of any cost/benefit analysis of burying the wires has seriously hampered resolving this issue, as the FIPP has pointed out. When NG and East Providence declared in their October 12, 2016 Joint Report and Motion at 1 that “the significant cost” and the risks of burial rendered it not feasible, the Board had no cost/benefit analysis with which to evaluate that statement, nor has it inquired about evaluating the degree of the risks of burial and ways of mitigating them. Similarly, when Maguire stated that structural modifications to the Seekonk River Linear Park bridge for attaching the cables would be “costly,” it did not estimate the costs, and no context in terms of the benefits of burial was available.

Confusion also reigns with regard to funding for burial. For example, the largest source of funds – the refund retained from Providence and East Providence ratepayers plus accrued interest, last calculated at \$9.4 million – has not been updated since last March, and NG reimbursing itself \$546,000 of the interest for “Labor” and “Legal Consultants” has not been reviewed in any detail, even though it appears that NG used some of this interest accrued on burial funds principally to argue against burial in testimony to the EFSB by its engineers, under questioning by its legal counsel.

With regard to the use of up to \$2 million “for purposes of under grounding [sic]” from NG’s Storm Contingency Fund, as authorized by state law (*See* RIGL 42-98-1.1), it has been said that the Storm Fund’s low or negative balance could preclude use of the \$2 million for burial, when in fact NG and the Division of Public Utilities have recently agreed to replenish the Storm Fund by \$84 million over four years, as well as extend the annual \$3 million distribution to the fund from ratepayer contributions. Plainly stated, nothing prevents the storm fund from being used to meet the legislature’s intent that \$2 million be allocated to this project, just as NG’s right to obtain funding for storms is also never contingent on the fund having a positive balance. In most instances the storm fund collects money from ratepayers *after* liabilities are assigned to the fund, since no one can predict the magnitude of damage from future storms. Storm Fund balances may be positive or negative at any particular time. Thus, when this project proceeds and \$2 million is dedicated from the Storm Fund as the legislature sanctioned, the Public Utilities Commission will set a prospective rate that seeks to restore the fund to a zero or positive level, no differently than it is currently doing for NG to reimburse the company for previously incurred storm restoration costs.

The \$2.5 million federal earmark obtained by then Senator Chafee in 2006 for burial has been included in NG reports on the \$17 million raised for burial in 2015 (*See* transcript of EFSB hearing on 6/16/15 at 50 and 51), and in NG’s Project Status Report to the EFSB on April 5, 2013. Yet NG’s Overview for the EFSB on August 22, 2011, indicated that the earmark would be revoked unless a Funding Agreement was signed by September 1, 2011. Similarly, the \$2.7 million for burial committed by Governor Carcieri and by RIDOT in June, 2004, was confirmed by Department of Administration attorney Mike Mitchell under Governor Chafee in several EFSB status conferences in 2011 and 2013.



NG's \$10.5 million "conceptual grade estimate" of the cost of the South Bridge Alignment (*see* 2/6/17 EFSB hearing transcript at 47) means that the company has the right to seek that amount from ISO-New England as a contribution to an underground solution. This is another major source of funding that would be available if the underground configuration extends all the way to East Providence, which would also eliminate the need for one transition station and remove all of the visual impacts along George Redman Linear Park bridge.

Finally, in support of its objection to Providence's Motion to Extend, East Providence refers to the unspecified delay that would result were the Partial Underground Alignment Proposal be considered. Yet, it is respectfully suggested that any theoretical negative consequences which might result from such unspecified delay – delay which by any account would be measured in weeks and months – is infinitesimal when compared to the negative impact which could result from a decision replacing hundred year-old towers with new overhead structures that will last not for weeks or months, but for a century or longer.

## II. CONCLUSION

For all the above reasons, Providence's October 10, 2017 Motion to Extend the Time for Briefing in the above matter should be granted so that Providence can detail, and the Board can consider, the Partial Underground Alignment Proposal.

THE FRIENDS OF INDIA POINT PARK  
By its attorney,



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Patrick Lynch Group  
One Park Row, 5<sup>th</sup> Floor  
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**CERTIFICATE OF SERVICE**

I hereby certify that I caused a true copy of the within *Amicus* Brief to be sent by e-mail to the following this 16<sup>th</sup> day of October, 2017:

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# **EXHIBIT A**



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## Burying Waterfront Power Lines Will Encourage Tourism & Boost Economic Development

The high-voltage power lines on the Providence and East Providence waterfronts are a conspicuous impediment to the two cities capitalizing on their location at the head of Narragansett Bay. Other cities have shown that burying wires helps transform industrial backwaters into **popular waterfront destinations**.

### CREATING AN ATTRACTIVE WATERFRONT DESTINATION WILL ENCOURAGE TOURISM

In **Providence**, the Riverwalks and the removal of overhead utility lines created an attractive public space that set the stage for Waterfire, which draws more than 1 million visitors a year who add more than \$100 million to the City's economy. Removing the eyesore of the waterfront overhead wires would entice some of the 10 million people who speed by on I-95 on their way to the Cape and the Islands every year to stop and spend some money in RI. If just 1% of them were to spend \$100 here, they would add \$10 million to our economy.

**Chattanooga, Louisville, San Antonio** and other mid-size cities have buried shoreline wires and reaped major economic and civic benefits by creating attractive waterfront destinations that draw millions of people.

**CHATTANOOGA** buried high-voltage power lines in its riverfront parks, upgraded the area, and now hosts a million people a year at festivals featuring music, arts, wine, boat races, and parades.

"Burying utility lines is critical to the overall enjoyment of great public spaces." -- *Jim Bowen, RiverCity Company, Chattanooga*

**LOUISVILLE** buried high-voltage wires and created Waterfront Park, which draws 1.5 million people to over 100 events a year: boat races, concerts, and festivals of fireworks, wine tasting, hot air balloons, etc.

"Waterfront Park has transformed a blighted industrial area into a popular gathering spot." -- *NY Times*

**SAN ANTONIO** buried utility lines on its Riverwalk, which draws about 5 million people a year to restaurants, boat rides and festivals, making it one of the **top tourist attractions in Texas**.

### BOOSTING ECONOMIC DEVELOPMENT WILL RAISE PROPERTY VALUES

Proximity to high-voltage power lines can depreciate property values by up to 30%, according to multiple studies in the US and Canada, as reported in the *Journal of Real Estate Literature* and elsewhere. Burying these wires will improve the marketability of key waterfront parcels, raise their property values, and increase the tax base of Providence and East for the foreseeable future.



Overhead waterfront power lines (solid yellow line) will be highly visible from projected development parcels in Providence and E. Providence, reducing their property value.

Waterfront developers and businesses in **Providence** (the Procaccianti Group, Residential Properties, and others) have written letters urging burial because it "will be a major asset to the Providence Waterfront and the redevelopment of the new 195 land parcels."

In **East Providence**, the wires and looming towers are highly visible from the new Tockwotton Home and other developable parcels. The East Providence Waterfront Commission urges burial to create "a **more attractive waterfront for future high-quality private development**" and for current residents.

# **EXHIBIT B**

December 16, 2013

Margaret Curran, Chairperson  
Janet Coit, Board Member  
Kevin Flynn, Board Member  
Rhode Island Energy Facility Siting Board  
89 Jefferson Blvd.  
Warwick, RI 02888

**RE: Docket SB-93-1 – Undergrounding Prov-E. Prov Waterfront Power Line**

Dear Chairperson Curran and Members of the Board:

Having placed considerable importance as Attorney General on burying the high-voltage power lines on the Providence- East Providence waterfront ten years ago, I am pleased that the Board has taken up this project, which has been delayed far too long. Since business-related travel prevents me from attending the Board's hearings, I would like to offer some observations which I hope will be helpful when the Board reconvenes December 17.

When this matter was first presented in 2003, it became clear to my Office that burial of the power lines presented a rare opportunity to dramatically improve the signature waterfront for the Capital City and the State for at least the next 100 years – long after you and I and even our children are gone. When I signed the Settlement Agreement in May, 2004, I was hopeful the project would proceed in a timely fashion, and of course had no way of knowing that Providence and East Providence would find themselves in the dire financial straits they now face.

**Increased Public Interest Benefits of Burial**

At the same time that the two cities confront major financial challenges, the public interest benefits of burying the waterfront power lines have become even more compelling than when we began this effort. The focus by many on the escalating costs of the project must be balanced against its lasting, less discussed public interest benefits, which have also escalated dramatically in the last decade. As you know, the Board is required by law to weigh cost considerations against public interest benefits, such as environmental quality, public health and safety, aesthetics, public recreation, and enhancing "the socio-economic fabric of the state" (RIGL 42-98-2, 11).

Consider that during the ten years this project has been in the works, the following developments have underscored the public interest benefits of burying the wires:



- Opening 19 acres of downtown land for development in Providence, as a result of the relocation of I-195, and making waterfront parcels in East Providence accessible for development. Many of these sites are in the visual corridor of the power lines, meaning that if the lines are buried, "property values in the area will lift substantially, enhancing development," as a recent Providence Journal editorial stated.
- Construction of East Providence's new residential Tockwotton Home in the shadow of the power lines and their electro-magnetic field (EMF). EMF exposure raises public health concerns recognized by state law (RIGL 39-25-2), and is of particular concern for residents. According to RIDOT's Environmental Impact Statement on the relocation of I-195, burying the power lines would reduce EMF exposure to "virtually nil."
- Construction (to be completed next year) of the linear park across the Seekonk River linking the highly popular East Bay Bike Path to India Point Park, which will likely exponentially increase use of the Bike Path by commuters and recreational cyclists entering the City.
- The emergence of an exciting proposal under consideration by the State for public use of the Shooters site, also overshadowed by the wires. This project could become a vibrant public destination for the capital region and the state.
- More than \$1 billion dollars in public funds spent to upgrade the area, including relocating I-195, improving India Point Park, building Waterfront Drive in East Providence, and reducing water pollution in the Upper Bay through the Combined Sewer Overflow project.
- Widespread power outages caused by storms and flooding, particularly during Irene. The waterfront power lines at the head of Narragansett Bay are located at the bull's eye of past storm surges, which are likely to become more severe as the sea level rises over the next 100 years. Burying these wires will dramatically reduce the risk of outages.

Given the Board's clear statutory mandate to factor public interest benefits into its decision making, I urge you to take judicial notice of these significant developments, which neither Mayor Taveras nor National Grid mentioned in their October 22 and November 4 letters, respectively, to the Board.

#### **Statewide Benefits of and Support for Burial**

Burying the waterfront wires has won broad public support not only from dozens of citizens groups, educational institutions, and municipal officials and governing bodies in Providence and East Providence, including the Presidents of Brown, RISD, and Johnson and Wales, but also substantial statewide support from state agencies, particularly DEM, DOT, EDC, and the Statewide Planning Program; numerous state office holders, including the current Governor and his predecessor; a unanimous resolution passed by the RI House of Representatives; waterfront developers with statewide impact such as the new Tockwotton Home and the RI Seafood Festival; half a dozen statewide organizations, including Save the Bay, the RI Building and Construction Trades Council, and the Conservation Law Foundation; and a petition at [www.friendsofindiapointpark.org](http://www.friendsofindiapointpark.org), which more than 1,000 people have signed, including residents of all 39 RI cities and towns.

Among the letters of support from organizations and more than 200 comments submitted by signers of the petition, there is a recurring emphasis on the importance of upgrading the Providence waterfront as a signature landmark of the City and the State. Ten million travelers a year pass by it on I-195 en route to and from Cape Cod. Burying these wires would greatly enhance the only water view from an interstate highway in Rhode Island, views that are a natural advertisement for the Ocean State, where tourism is our second largest industry. The benefits of increased property values, enhanced aesthetic appeal, and greater

economic development after burying the wires – which other mid-size cities like Chattanooga, Louisville, and San Antonio have experienced after burying their waterfront power lines – would be felt for generations to come.

#### **Spreading the Cost to a Broader Base**

It is illogical to place the fate of such a long term enhancement in the hands of two cities burdened by short term financial hardships. Burying the waterfront wires is a public works project, ie, one with benefits so far-reaching that they are incalculable. Multiple studies show that proximity to high-voltage power lines can depreciate property values by as much as 30%, but how do you estimate the monetary benefit of increased property values over 100-200 years due to buried power lines? The benefits are very significant but far too broad and too dependent on variables to be measurable.

When Rhode Island has undertaken other public works projects with lasting, incalculable benefits – such as relocating I-195, moving the rivers and creating riverwalks downtown, the current Combined Sewer Overflow project, and building TF Green airport – we have not placed their fate in the hands of strapped municipalities. We have spread out the financial burden over a broader base, including socializing surcharges across taxpayers or ratepayers statewide. The same approach makes sense for burying the power lines: the shortfall should not be covered only by Providence and East Providence ratepayers, as currently envisioned, but should be spread out to a broader base that will also benefit from the project.

#### **Asking ISO-New England to Fund Burial Under the Seekonk River**

The waterfront power lines play a critical role in providing electricity for Rhode Island and southeastern New England because they are part of the E-183 line that carries electricity between the Manchester Street station in Providence and the Brayton Point power plant in Somerset, MA. Power is then distributed to the East Bay from Brayton Point, and to the West Bay from Manchester Street. Recognizing the waterfront power lines' indispensable role in the region, ISO-New England, the regional grid organization, agreed in 2006 to contribute \$1.5 million to the burial project, which is equivalent to the cost, based on National Grid's 2004 estimate, of replacing the antiquated Seekonk River crossing with new overhead wires, in the event they aren't buried under the river.

But a strong case can be made that none of the three possible overhead routes across the Seekonk is feasible, and ISO's contribution to the project should instead pay for burying the wires under the Seekonk. The three possible overhead routes were added to the 2004 Settlement Agreement as a kind of afterthought, in case burial didn't happen. They have not been seriously vetted, and for various reasons are not likely to survive close scrutiny. The Army Corps of Engineers' qualms about one of these routes – the current location of the overhead Seekonk crossing – were so serious that in 2003 it withdrew its permit for lowering the wires, which National Grid had proposed, because lower wires would create a navigational hazard for sailing vessels passing under them to the marinas in East Providence. The two other possible routes, one on either side of the I-195 bridges across the Seekonk, present other serious problems that offer no clear path to resolution. The process of vetting them would further delay the project for years.

If National Grid, Providence, and East Providence were to join forces and successfully make the case for ISO to pay for burying the wires under the Seekonk, the regional grid's contribution to the project would increase from \$1.5 million to \$5-6 million, thus spreading some of the financial burden for the project to a larger entity, the regional grid, that would also benefit from it. Such additional financial support could eliminate the project's shortfall altogether, or reduce it to the point where the surcharge on ratepayers to cover the remaining shortfall would be a nominal amount, especially if spread among ratepayers statewide, as the Board has ordered for other projects, such as relocating power lines farther away from East Greenwich residences in 1994.

### **Updating National Grid's Cost Estimate**

I commend the Board for encouraging National Grid to update its cost estimate for the project. Its last estimate in January, 2007, came to \$19.4 million, meaning that with at least \$17.2 million raised and designated for the project (see below), the shortfall would be about \$2 million, which could be covered by a surcharge of about six cents a month for the average Providence and East Providence ratepayer.

But National Grid's updated cost estimate will certainly be greater than \$19 million, though the total funds raised for the project will also increase when National Grid updates its calculation of the interest earned on the \$5.8 million that the company set aside for burial in 2004. If ISO pays for burying the wires under the Seekonk, the amount raised for burial will increase more substantially. It seems unlikely the estimate for the project will increase by the 3% escalation figure that National Grid has applied to it, given the sluggish state of the economy and the resulting stiff competition among contractors, which has led Narragansett Bay Commission's construction projects in recent years to come in an average of 36% below their estimated cost.

Regarding funding the new cost estimate, I urge the Board to reject National Grid's request to pay for its updated estimate out of interest accrued on the funds set aside for burial in 2004. The obligation to produce a legitimate construction grade cost estimate always resided with National Grid under the explicit terms of the Settlement Agreement. That financial obligation cannot be met by using burial funds without the unanimous consent of the parties to the Settlement.

National Grid's reluctance to use the operative term "construction grade" with regard to its estimates suggests that the company has been in breach of its obligation under the Settlement Agreement to provide such an estimate on November 15, 2004. National Grid's current request to use burial funds to finance its updated estimate represents another breach of contract, and the Board has neither a basis nor jurisdiction to entertain such a request. It should order National Grid to produce its upgraded construction grade cost estimate at the company's expense.

As a point of clarification, the Board should ask National Grid how it paid for estimates in the past and why it objects to paying for an updated one by the same method now. Allowing National Grid to use burial funds – many of them laboriously accumulated over many years – to meet its obligation under the Settlement Agreement is not in the best interest of completing the project. The Board should also ask National Grid for a breakdown of the \$500,000 to \$1 million it estimates spending on updating its estimate, and for a comparison of its projected budget to the cost of its earlier estimates.

Similarly, the Board should ask National Grid why it estimates a timeline of "approximately nine months" to update its estimate, when it produced its initial estimate in five and a half months in 2004. National Grid has already benefited from the onsite analysis of horizontal directional drilling done by JD Hair, a leading expert in the field, when it brought the Oklahoma company to Providence in 2004. Hopefully National Grid could also save time and money by taking advantage of the extensive borings data that the Narragansett Bay Commission has compiled on soils in the Providence River, which National Grid was provided with at the Board's October 23 hearing.

### **At Least \$17 Million Raised and Designated for Burial**

As National Grid stated at the October Board meeting, as well as in its April 5, 2013, letter to the Board, about \$17.2 million has been raised and designated for burial, as follows:

- **\$8.1 million:** the \$5.8M refund for Providence & East Providence ratepayers set aside in 11/04, and \$2.3M in interest accrued through 12/12, meaning that more interest will be forthcoming.
- **\$2.5 million** from the federal earmark obtained by then Senator Chafee in 6/04.

- **\$2.7 million** committed by then Gov. Carcieri in 6/04, including \$200k committed by then RIDOT Dir. Capaldi.
- **\$2 million** from National Grid's Storm Fund.
- **\$1.5 million** from ISO-New England, which will increase if National Grid updates its '04 estimate, and would increase significantly if ISO agrees to pay for undergrounding the Seekonk crossing, per above.
- **\$.375million** from two Greenways Grants through RIDEM and RIDOT.

More details on these funds and their current status are available at [www.friendsofindiapointpark.org](http://www.friendsofindiapointpark.org). The suggestion in Mayor Taveras' October 22 letter that "essentially all of the funds" raised for burial will have to be used to address feasibility issues regarding horizontal directional drilling is inaccurate at best. Even if JD Hair had not made onsite visits to confirm the feasibility of directional drilling for the project, it defies logic to suggest that it would cost \$17 million to resolve any remaining feasibility issues.

I appreciate your considering these observations, and hope they are helpful in bringing this important project finally to completion. I look forward to attending future Board hearings as my schedule permits.

Sincerely,

  
Patrick C. Lynch

# **EXHIBIT C**



PO Box 603172, Providence, RI 02906  
[info@friendsofindiapointpark.org](mailto:info@friendsofindiapointpark.org)  
[www.friendsofindiapointpark.org](http://www.friendsofindiapointpark.org)

March 1, 2017

Chair Meg Curran  
Director Janet Colt  
Director Parag Agrawal  
Energy Facility Siting Board, via email

Dear Chair Curran, Director Colt, and Director Agrawal,

**Re: Waterfront changes and the record on power lines burial being feasible and divisible**

I am writing to urge you to review three crucial aspects of the waterfront power lines issue which we believe the Board has overlooked: the significant changes on the waterfront since the 2004 Settlement Agreement was signed; statements in the record that that burial is "feasible," "constructible," and "aligned with standard industry practice"; and evidence that it is divisible.

Since National Grid proposes to replace 100-year-old towers with new ones, your decision on burying these lines will shape our waterfront for the next century.

**1. The Board should review of the economic, social and environmental benefits of burial in light of the significant changes on the waterfront in the last 13 years.**

State law mandates that the Board grant a license "only upon finding that...the proposed facility will not cause unacceptable harm to the environment and will **enhance the socio-economic fabric of the state.**" (RIGL 42-98-11 (b) (3); bold added.) The significant changes on the waterfront since the Board issued its finding in 2004 warrant the Board reviewing that finding so that it takes into account the waterfront as it is today.

Changes on the waterfront include:

- the marketing of I-195 lands, many with views of the power lines that depress property values, including views from a proposed residential tower that would overlook the waterfront
- the re-establishment of the Newport ferry at the former Shooters site and proposed central market with restaurants at the site in the shadow of the power lines
- other new developments with particularly conspicuous and economically deleterious views of the wires, such as:
  - the upgraded Hilton Garden Inn adjacent to the enhanced India Point Park, which the Parks Department estimates is used by more than 150,000 people annually
  - the popular linear park over the Seekonk River
  - the Tockwotton facility
  - the planned concert venue at Bold Point Park in East Providence where the power lines conspicuously detract from views of the city skyline.

Surely state law does not intend the Board to base its assessment of what enhances the socio-economic fabric of the State on outdated information. A **thorough cost/benefit analysis** of the economic, social, and environmental benefits of burial, including increased tourism, property values, and municipal tax base over the next 100 years, is essential for the Board to accurately evaluate the burial proposal. We urge the Board to commission such an analysis as soon as possible. By leaving it up to the parties to decide whether to bury the lines, the Board is abrogating its responsibility to consider the full impact of its 100-year decision.

2. **The record shows that three consultants have determined that burying the waterfront power lines is feasible, and that RIDOT has not concluded that using the bridges is not feasible.**

The Board was mistaken in stating at its February 16<sup>th</sup> meeting that the record shows burial is not feasible. In its attached report (pp. 3-4), the National Grid-approved consultant Power Engineers (1) stated that a horizontal directional drilling (HDD) contractor's review of the data showed "the alignments were considered **feasible** for construction," and (2) concluded that the burial project "is **aligned with standard industry practice and is constructible**" (bold added).

PDC, another consultant who reviewed the project, said it was "in general agreement" with Power Engineers and also found the project to be "aligned with standard industry practice" (p. 12 of the attached PDC report).

We urge the Board to find out the identity and credentials of the "HDD consultant" who reviewed the burial project and considered it "feasible." The consultant could put in perspective National Grid engineers' testimony which has consistently emphasized the risks and uncertainties of horizontal directional drilling (HDD), without acknowledging the **significant advances in HDD accuracy** in recent years. (A 12/16 article about such advances is available at <https://trenchlesstechnology.com/directional-drilling-tracking-guiding-101/>.) We can recommend to the Board another HDD expert who believes that the consultants' reports tend to reflect National Grid's "no-can-do, chicken little" attitude toward burial.

South Carolina Electric and Gas is an example of an investor-owned utility that has relied on HDD advances and three times has successfully buried 7,000-feet of high-voltage power lines under Charleston harbor over a distance nearly seven times longer than the proposed route under the Providence River. We can provide the Board with a contact at SCE&G.

**Regarding using the bridges**, National Grid continues to testify falsely that the RI Department of Transportation (RIDOT) said it was not feasible to attach the wires to the I-195 Providence River bridge. In fact RIDOT's chief engineer at the time testified that he did not know if using the Providence River bridge is feasible and "would have to investigate." The Public Utility Commission's advisory opinion confirmed RIDOT's testimony. (See p. 1 of our attached memo.)

**3. The Board is mistaken in thinking that ruling on the feasibility of the burial route is an all-or-nothing proposition.**

In fact, the record shows that the burial route consists of three distinct, divisible sections, some more problematic and costly than others. We urge the Board to take that fact into account before ruling on the feasibility of the entire burial project.

**A) Between the rivers:** Burial along India Point Park presents none of the challenges, risks and costs associated with HDD under the rivers, or with attaching lines to the highway bridges. Accommodating existing sewer lines under India Street has not been shown to be an unsurmountable challenge, and the "cut and cover" method that would be used on this section is relatively straight forward and would minimize disruption.

Burying the lines only between the rivers would likely not require acquiring land for transition stations: one could be built on the eastern bank of the Providence River where pole #2 now stands, and another on the western bank of the Seekonk, on RIDOT land near the Brown Boathouse where NG proposes to build a new tower if the lines remain overhead. (On the attached map, see "Temp. pole 2." The RIDOT land is near the river, directly east of what was then the "Radisson Hotel.")

**B) The Seekonk River:** the bridge appears to present fewer challenges than the Providence River bridge for attaching the lines, and the burial route would be shorter (950 feet) and in "more favorable" conditions than burial under the Providence River, according to p. 8 of PDC's attached report. Using the RIDOT land referred to above and a land swap planned by East Providence on the eastern bank would also likely avoid acquisition costs for transition stations for the Seekonk River crossing.

**C) The Providence River** may be the most problematic: its bridge appears to present more significant challenges for carrying the wires than the Washington Bridge over the Seekonk. The burial route under the Providence River would be longer than under the Seekonk, could be riskier, and could require (depending on the route chosen) acquiring an easement for the parcel next to Al Forno restaurant. (In that regard, National Grid has falsely testified that this parcel would have to be acquired and condemned; in fact, its owner has testified that he is amenable to National Grid acquiring an easement for the necessary manhole cover, which it has been shown would be unlikely to significantly impede developing his property.)

**Benefits of partial burial:** Significant benefits of burying the lines between the rivers and under or alongside the Washington Bridge include:

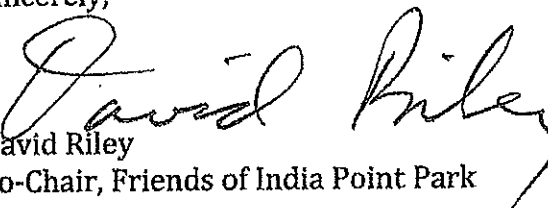
- removing the antiquated 100-year-old Seekonk towers, which must be replaced
- increased tourism, property values and municipal tax bases over 100 years resulting from greatly improving the views from India Point Park, Fox Point, downtown, and Bold Point Park and the Tockwotton in East Providence.
- If the overhead Seekonk crossing can be avoided, the views will also greatly improve along the East Providence waterfront's developable land, the Seekonk linear park, and I-195, which is the gateway to Providence for millions of travelers.



**Cost:** The \$27 million that could be available for the burial project might well cover burying the wires between the rivers and a new Seekonk River crossing, whether underground, attached to the Washington Bridge, or if need be, overhead. The \$27 million total could come from the \$16.5 million already raised for burial and the \$10.5 million estimated cost of a new overhead Seekonk crossing, which National Grid presumably will ask ISO New England to contribute to the project, updating the \$1.5 million it agreed to contribute in 2006. ISO's commitment is to pay for an overhead replacement of the antiquated Seekonk River crossing, on the understanding that those funds could be contributed to replacing that crossing by burying the line under the River or attaching it to the Washington Bridge.

Thank you for considering our views on the waterfront power lines issue. We hope this perspective is helpful to the Board and would be glad to answer any questions.

Sincerely,

  
David Riley  
Co-Chair, Friends of India Point Park

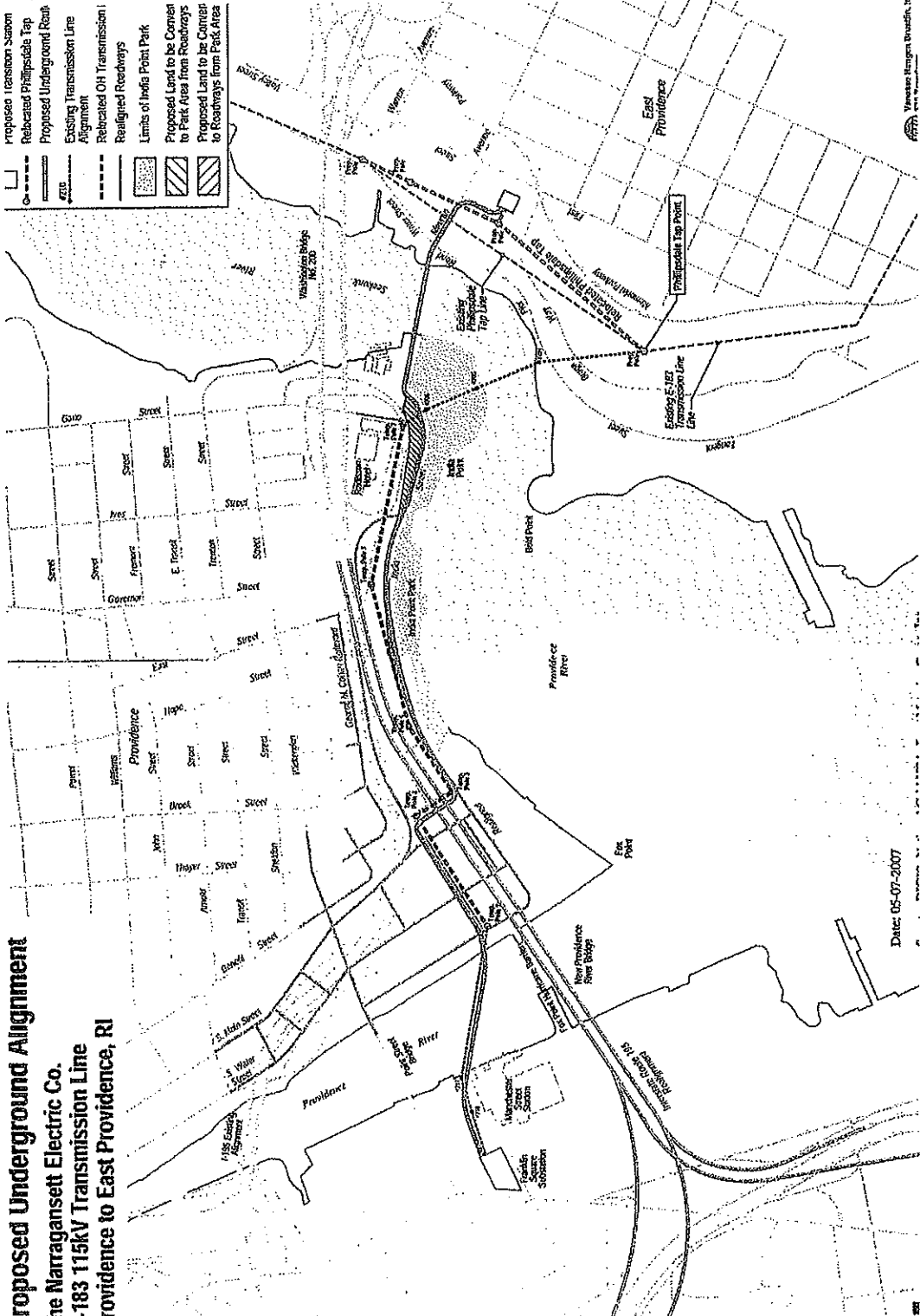
Attachments:

- Power Engineers report on burial project
- PDC report on the project
- FIPP 10/20/17 memo
- Map of burial route

# **EXHIBIT D**

**Proposed Underground Alignment  
 The Narragansett Electric Co.  
 - 183 115kV Transmission Line  
 Providence to East Providence, RI**

- Proposed Transition Station
- Rebricated Pile/Side Tap
- Proposed Underground Realign
- Existing Transmission Line
- Rebricated OH Transmission Alignment
- Rebricated OH Transmission
- Realigned Roadways
- Limits of India Point Park
- Proposed Land to be Conveyed to Park Area from Roadways
- Proposed Land to be Conveyed to Roadways from Park Area



Date: 05-07-2007

Yonkers Hanger Drafting, Inc.

# **EXHIBIT E**

**From:** Ponti, Rick <Rick.Ponti@stantec.com>

**To:** david riley <davidriley@aol.com>

**Subject:** Tran Line Letter

**Date:** Tue, Oct 10, 2017 6:51 am

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Hi David,

I worked for five years for a power division at Parsons Brinkerhoff, have three decades experience as a trenchless engineer, and have consulted experts who have worked on power projects around the world. I am familiar with transmission elements.

Upon review of the materials supplied, I estimate that it would cost \$1.5 million per 1,000 linear feet to bury the power lines between the Providence and Seekonk Rivers by the conventional cut-and-cover method. The route from Pole #3 to the Seekonk River, going north of the Hilton Gardens Inn, looks to be about 2,500 feet, meaning that cut-and-cover burial on that route would cost **\$3,750,000**.

Additional funds would be needed for transition stations – about \$1M per station, not counting land acquisition – and \$750,000 to \$1M for an auger bore or pipe jack under I-195, between Pole #2 and #3.

Regarding transition stations, I'm not convinced that they need ½ an acre; the disturbance during construction may need that much space, but a 100' x100' parcel is about ¼ of an acre, and 50' x 125' is a little smaller than that. Concerns about salt runoff from I-195 could be addressed by cutting a small portion into the slope, reinforcing the embankment, and constructing an enclosure like an architecturally appealing brick faced structure for protection of the transition station. My impression is that the feasibility studies that have been done have not released cost estimates for the different parts of the project, ie, cut-and-cover, HDD for each river crossing, attaching the lines to the Seekonk pedestrian bridge, at least 5 alignment options, and locating transition stations on publicly owned land. It seems to me, with millions of dollars and the future of the waterfront at stake, the cost estimates should be broken down into relevant parts for better analyses and feasibility. I hope this letter helps to clarify a few things. Take care.

**Rick Ponti, PG**

Technical Advisor

Senior Engineering Geologist

Stantec

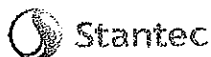
5 Dartmouth Drive Suite 101 Auburn NH 03032-3984

Phone: 603-206-7531

Cell: 603-369-2419

Fax: 603-669-7836

Rick.Ponti@stantec.com



# **EXHIBIT F**

# Feasibility of Undergrounding Waterfront Power Lines

E-183 115 kV Transmission Line Relocation Project  
Providence and East Providence, Rhode Island

October 2017

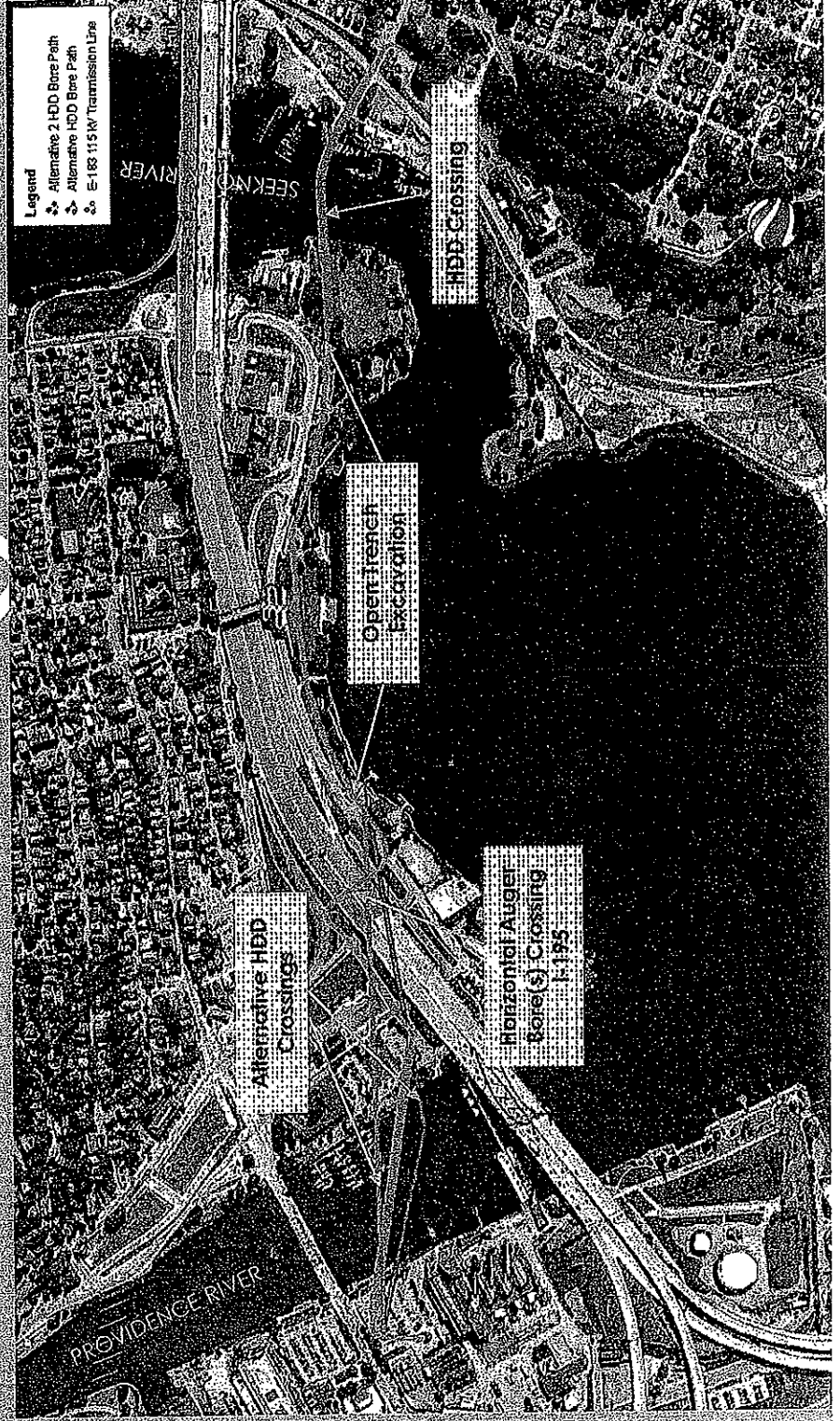


Stantec

# Proposed Routes for Underground Cables

Map below shows burial route proposed in 2006 and 2014 (green) and alternative routes for crossing the Providence River proposed in 2015 (red and blue). Route consists of:

- Cut-and-Cover Open Trench Method Between the Rivers
- Horizontal Direction Drill (HDD) River Crossings





# Methods for Undergrounding Cables

## 1. Cut-and-Cover Trench Method

- Very commonly used in urban areas. would bury cables between Providence and Seekonk Rivers. **62%** of total project
- 4,000 linear ft (90% in soil, 10% in rock)

## 2. Providence River HDD Crossing

- Horizontal Directional Drill
- 1,200 lf (green route) **19%** of total project

## 3. Seekonk River HDD Crossing

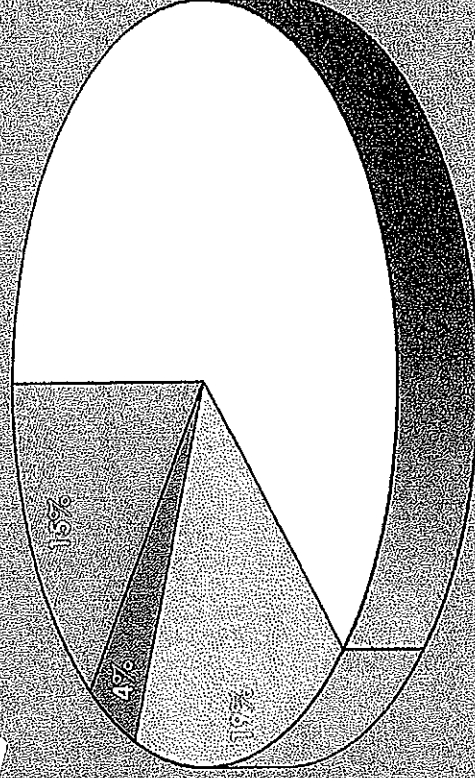
- Horizontal Directional Drill
- 950 lf **15%** of total project

## 4. Interstate-195 Crossing

- Horizontal Auger Bore
- 275 lf **4%** of total project

**NOTE:** If red or blue route is used for the Providence River HDD, that crossing will increase from 1,200 to 2,100 lf, leaving the cut-and-cover trench covering 53% of the total project.

Total 6,425 lf



Open Cut Methods

Providence River HDD Crossing

Horizontal Auger Boring

Seekonk River HDD Crossing



3

# Consultant Reports on Providence Burial Project

- **Power Engineers, 10/21/14**, studied the green burial route, subcontracted with S.W. Cole for 16 borings along the route, and provided a cost estimate of \$33.9M, in conjunction with National Grid. Detailed findings were not made public.
- **Power Delivery Consultants (PDC), 4/10/15**, reviewed Power Engineers report and subcontracted with Haley & Aldrich (H&A), 5/5/15, to propose alternative red route for Providence River HDD crossing. (PDC also conducted initial undergrounding study for National Grid in 2004 and 2006.)
- **Power Engineers, 9/3/15**, reviewed PDC/H&A reports and determined that the alternative red route for the Providence River HDD crossing would not reduce construction risks.

# Consultants Have Determined Burial Is Feasible

- “PDC has determined that the proposed project is **aligned with standard industry practice**... [and] is in general agreement with the work Power Engineers has done to date on this project.”  
– PDC Report, 4/10/15, p. 12
- “POWER asked an HDD contractor to review the geotechnical data...Based on their review and comments, the alignments were considered **feasible** for construction!”
- After reviewing PDC’s report, “POWER still believes that the proposed project is aligned with standard industry practice and is **constructible**.”  
– Power Engineers Report, 9/3/15, pp.3-4

**“We can do it. The riverbed would be suitable.”**

– Nat’l Grid Spokesman David Graves  
on the burial project, Prov. Jrl, 11/4/14

# Stantec on Project's Feasibility & HDD Advances

- "This burial project is **highly feasible**. We are confident that a meticulous, methodical approach will be successful for the 1-2,000 ft HDD distances planned for the Providence and Seekonk River crossings, which are relatively short and **virtually routine**."  
-- Rick Ponti, Stantec trenchless engineer.
- "HDD projects of 2-3,000 ft are now accurate enough to reach their target within **1/10th of a foot**."  
-- Rick Ponti, Stantec trenchless engineer.
- **Major advances in HDD technology** in recent years have dramatically increased HDD power, speed, accuracy, and efficiency, resulting in successful underwater HDD projects covering distances 5-10 times greater than those being considered for the rivers in Providence.  
  
HDD projects in SC, LA, and TX have covered 7,000 ft (under Charleston harbor and Sabine River) and 10,900 ft (under Lake Houston).  
-- [www.whatech.com](http://www.whatech.com), [www.tdworld.com](http://www.tdworld.com)



## Partial Burial of Power Lines

Project costs would be dramatically reduced if the cables were buried on the land between the bridges and under the Seekonk River.

- Stantec engineer Rick Ponti estimates that the commonly used cut-and-cover method would cost about \$1.5 million per 1,000 linear feet to bury the cables between the rivers, so burying for the approximately 2,500 feet between Temporary Pole #3 and the Seekonk River on a route north of the Hilton Garden Inn, would cost about **\$3.75M**.
- It would cost **\$750,000-\$1M** for an auger bore under I-195, and about **\$1M** for a transfer station, ideally at Temporary Pole #2, meaning a total of \$5,500,000-\$5,750,000 to bury between the rivers.

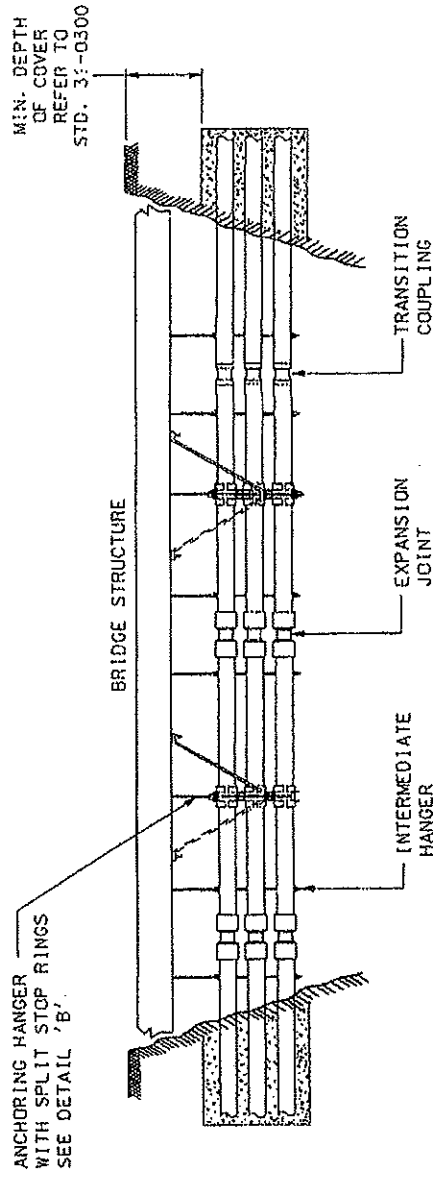
With a site visit and additional research, Stantec could provide a thorough feasibility study and cost estimate for Providence's partial burial proposal.

- Geotechnical borings indicate "**more favorable** geotechnical conditions for HDD installation" in the Seekonk River than in the Providence River.
  - PDC 2015 report, p.8, bold added
- The hurricane barrier: "The Army Corps did allow a pipe jacking penetration of the dam on the Manchester Street property for a gas line installation and there are other existing utility **crossings of the hurricane barrier** structure....it has been done before."
  - National Grid engineer Campilli, EFSB hearing, 6/16/15, pp. 37-39



# Attaching Cables to Seekonk River Bridge

Attaching the waterfront power lines to the Seekonk Pedestrian River Bridge is "possible," according to the Maguire bridge study. Unfortunately, the PDC/Maguire reports don't provide a cost estimate. Stantec estimates the cables could be attached to the bridge for \$2-5 million. (The \$5M estimate includes a 50% contingency.)



BRIDGE CROSSING (TYP.)