

February 17, 2009

VIA HAND DELIVERY & ELECTRONIC MAIL

Luly E. Massaro, Clerk Rhode Island Public Utilities Commission and Division of Public Utilities and Carriers 89 Jefferson Boulevard Warwick, RI 02888

RE: Docket No. - National Grid Gas FY2010 Final Accelerated Replacement **Program Filing**

Dear Ms. Massaro:

Enclosed for filing please find an original and nine (9) copies of National Grid's final Accelerated Replacement Program ("ARP") proposal for the upcoming fiscal year beginning April 1, 2009 (i.e. FY 2010). As described in Attachment NG-SLF-1 of Susan L. Fleck's testimony in Docket No. 3943 ("Attachment NG-SLF-1"), after Commission and Division staff review of its draft implementation schedule, the Company is now filing a final copy of its proposed ARP implementation schedule for Commission approval.

At the February 6, 2009 technical session ("Technical Session") in this matter, the following questions and issues were raised relative to the Company's implementation schedule: (1) how the Company will measure the success of its program, (2) how the Company will update the Commission on program changes during the construction season, which may occur from time to time, and (3) what program costs were reflected on Table 1 of the Company's January 15, 2009 ARP filing.

Tracking Program Effectiveness

The Company proposes to track the effectiveness of its ARP in terms of reducing risk in the most efficient and cost effective manner as possible. As Mr. Kern explained at the technical session, the Company's goal is to reduce the relative risk associated with its aging infrastructure over time. There is, however, no one criteria or metric that the Company can use to measure program success. This is due to the fact that relative risk, program costs, and other key program elements change over time. Nevertheless, the Company has identified below several criteria that, when considered together as well as over time, should provide a reasonable picture of the effort and progress National Grid is making to reduce the relative risk associated with its aging bare steel and

¹ The Narragansett Electric Company d/b/a National Grid.

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cast iron infrastructure. Based on guidance from the Commission as well as Commission Staff and Division staff, the Company proposes that it include a "scorecard" as part of its Annual ARP cost recovery filing, which would include data on the following program metrics:²

Program Targets:

- 1) Miles of plastic mains and number of plastic services installed during program year compared to baseline
- 2) Percent of plastic mains and number of plastic services relative to total mains and services compared to baseline
- 3) Miles of bare steel and cast iron mains abandoned
- 4) Number of bare steel and cast iron services abandoned

Safety Enhancements:

- 1) Number of repair clamps eliminated steel compared to baseline
- 2) Number of breaks or leaking joints eliminated cast iron compared to baseline
- 3) Leaks per mile/ Bare Steel/ Cast iron compared to baseline

Program Costs (Match Table 1 of 1/15 Filing):

- 1) Total Program Costs (loaded) by following categories:
 - Main Replacement Bare Steel
 - Main Replacement Small Diameter & High Risk Cast Iron
 - Service Replacements for Bare Steel Main Replacement
 - Service Replacement Program for Bare Steel High Pressure Inside Sets
- 2) Actual vs. estimated cost per mile of new plastic main installed
- 3) Actual vs. estimated cost per unit of new service installed

Program Changes During Construction Season

During the construction season, changes to the Company's implementation schedule may occur from time to time as projects are reprioritized based on additional information. As explained on Page 2 of Attachment NG-SLF-1, by May 1, the Company will finalize actual projects and provide a copy of the final plans to the Safety Division for confirmation that it is consistent with the approval granted by the Commission. In addition, the Company proposes providing periodic updates (e.g., monthly or as needed, whichever period is longer) to the Division and Commission staff regarding any changes to the ARP schedule, including reasons for the change, prior to construction.

Program Costs

At the Commission's February 6 technical session, there were questions related to the program costs reflected on Table 1 of the Company's January 15, 2009 ARP filing ("Table 1"), and what information the Company will include in its Annual ARP cost recovery filing.

² The Company notes that the total number of leaks in a particular year may continue to rise during the early years of the ARP, as the remaining pipe is subject to further degradation. However, the Company fully expects that over time the ARP will result in a decrease in the leak rate. Therefore, leak rates in the early program years may not necessarily indicate program success or failure.

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The program costs reflected on Table 1 of the Company's January 15, 2009 filing and included below are the total projected costs associated with the bare steel and small diameter cast iron main replacements as well as for the high pressure bare steel services. These costs include both the baseline and incremental ARP program costs.

The Company anticipates filing, as part of its annual reconciliation, a "variance report" to explain individual project cost over runs beyond a pre-determined threshold over estimated costs (e.g., 10%-15%). For example, if it turns out a job requires curb to curb resurfacing, which caused the project to run 17% over budget, because the original cost estimate was based on restoring just the trench, then National Grid will provide an explanation why it exceeded its budgeted costs (e.g., curb to curb paving was required in order to obtain the permit). National Grid also anticipates working further with all interested parties on additional information necessary for the Commission to evaluate future requests for ARP-related cost recoveries.

Further, National Grid will be closely coordinating its effort with the bare steel high pressure service replacements with other mandated inside inspection and meter exchange programs. As such, the Company will include a separate list of completed bare steel high pressure service replacement projects and associated costs as part of its Annual ARP cost recovery filing. National Grid expects that this upfront work will further the dialogue with the Commission and Division staff on how best to administer this important new program.

Lastly, the Company provides as part of Attachment 1 of this letter the current list of proposed projects, listed in order of prioritization, which the Company has preliminarily identified as the total number of main and non-high pressure service candidates for replacement during FY 2010. There have been no changes to the list provided in Attachment 1 of the Company's January 15, 2009 filing.

As shown in Column C of Table 1 below, the total targeted investment amounts for FY 2010 of \$26.7 Million are as follows:

- Estimated main replacement costs \$13.8 Million;³
- Estimated non-high pressure service replacement costs \$5.9 Million;⁴
- Estimated high pressure service replacement costs \$6.9 Million;⁵

³ See Attachment 1, Column P for a breakdown of all main replacement-related projects, including both Main Replacement Bare Steel and Main Replacement Small Diameter Cast Iron projects. These figures correspond to the projected FY 2010 capital budget figures listed on Lines 7 and 8 of Attachment NG-SLF-2 (i.e., \$9,649,080 and \$3,958,416), respectively, and are included in Table 1, Column B for convenience.

⁴ See Attachment 1, Column Q for a breakdown of all non-high pressure service replacement-related work tied to all main replacement related projects. These figures correspond to the projected FY 2010 capital budget figure listed on Line 9 of Attachment NG-SLF-2 (i.e., \$6,131,616), and included in Table 1, Column B for convenience.

⁵ The Company's FY 2010 cost estimate for Service Replacement Program - Bare Steel H.P. Inside Sets is based on replacing a targeted 25% of the remaining 8,261 high pressure bare steel meter sets, or approximately 2,100 sets at \$3,250 / set.

| TABLE 1 | | | | | | | | | | | | |
|----------|---|------------------------|-----------------|--|--|--|--|--|--|--|--|--|
| Line No. | A | В | C | | | | | | | | | |
| | | Docket No. 3943 | 01.15.09 Filing | | | | | | | | | |
| | | Attachment NG-SLF-2 | Attachment 1 | | | | | | | | | |
| | | FY 2010 | FY 2010 | | | | | | | | | |
| | Proactive Integrity Programs | | | | | | | | | | | |
| 1 | Main Replacements Bare Steel | \$ 9,694,080 | | | | | | | | | | |
| 2 | Main Replacement Small Diameter & High Risk CI | \$ 3,958,416 | | | | | | | | | | |
| 3 | Sub Total (Line 1 + 2) | \$ 13,652,496 | \$ 13,779,093 | | | | | | | | | |
| 4 | Service Replacements Associated With Main Replacement | \$ 6,131,616 | \$ 5,889,713 | | | | | | | | | |
| 5 | Sub Total (Line 3 + 4) | \$ 19,784,112 | \$ 19,668,806 | | | | | | | | | |
| 6 | Service Replacement Program - Bare Steel H.P. Inside Sets | \$ 6,906,250 | \$ 6,906,250 | | | | | | | | | |
| 7 | Grand Total (Line 5 + 6) | \$ 26,690,362 | \$ 26,575,056 | | | | | | | | | |

Based on feedback from the February 6, 2009 technical session, National Grid will continue using the prioritization method it presented in order to develop its proposed project candidate list.

Thank you for your attention to this transmittal. If you have any questions, please call me at (401) 784-7667.

Very truly yours,

Thomas R. Teehan

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Enclosures

cc: Leo Wold, Esq., Office of the Attorney General

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National Grid - Rhode Island - Gas FY 2010 Accelerated Replacement Program Main & Non-HP Service Replacement Candidates

| | A | В | С | D | E | F | G | Н | I | J | K | L | M | N | 0 | P | Q | R | S | T |
|-----|---------|---------------|----------|------------|-----------------|---|--|------------------|------------------|------|--------------------|--------------------------|---------|--------------------|------------------|--------------|----------------|-------------|-----------|-------------------|
| Ite | | | | | | | | F4 | E4 | | C4 | D.I | Relay/ | | 4 - 6 | Estimated | Estimated | Total | AVG LCost | Prioritiz |
| | Project | Paving Paving | Category | Division | Municipality | Location / Street | Project Limits | Exst Diameter | Exst Material | YOI | System Pressure | <u>Relay</u> Diameter | Insert | Abandon Footage | # of Services | Loaded Main | Loaded Service | Estimated | / Foot | t ation Factor |
| | | | | | | | | | | | | | Footage | | | Cost | Cost | Loaded Cost | | (Pr) |
| 1 | 0398 | | AR | Providence | Providence | Manton Ave #928 | Fruit Hill Ave | 6 | CI | 1905 | Low | 6 | 55 | 55 | 0 | \$6,737.50 | \$2,887.50 | \$9,625 | \$175.00 | 1022 |
| 2 | 0249 | | AR | Providence | East Greenwich | Queen St. at Water St. | High St., south to #45 Water St. | 2 | BS | 1944 | High | 2 | 460 | 460 | 4 | \$48,300.00 | \$20,700.00 | \$69,000 | \$150.00 | 850 |
| 3 | 0399 | _ | AR | Providence | Providence | Woodbine | Ivy St | 4 | CI | 1899 | Low | 6 | 125 | 125 | 2 | \$14,350.00 | \$6,150.00 | \$20,500 | \$164.00 | 748 |
| 4 | 0252 | _ | AR | Providence | Warwick | Potowomut Rd. | At house #119 Potowomut Rd. | 2 | BS | 1951 | High | 2 | 25 | 50 | 1 | \$2,537.50 | \$1,087.50 | \$3,625 | \$145.00 | 700 |
| 5 | 0400 | _ | AR | Providence | Providence | Larch | Ivy St | 4 | CI | 1899 | Low | 6 | 105 | 105 | 2 | \$12,054.00 | \$5,166.00 | \$17,220 | \$164.00 | 568 |
| 6 | 0402 | _ | AR | Providence | Providence | Public St #380 | Milk Street | 6 | CI | 1875 | Low | 6 | 123 | 123 | 0 | \$14,120.40 | \$6,051.60 | \$20,172 | \$164.00 | 559 |
| 7 | 0238 | _ | AR | Providence | Coventry | Wood Cove Dr. | Between #74 and #76 Wood Cove Dr. | 2 | BS | 1967 | High | 2 | 60 | 60 | 2 | \$5,670.00 | \$2,430.00 | \$8,100 | \$135.00 | 525 |
| 8 | 0289 | _ | AR | Providence | Warwick | West Natick Rd. | Bald Hill Rd. to Greenwich Ave. | 6 | BS | 1964 | High | 6 | 2,000 | 2,000 | 8 | \$229,600.00 | \$98,400.00 | \$328,000 | \$164.00 | 525 |
| 9 | 0181 | _ | AR | Providence | Warwick | Post Rd., Pleasant St. | West Shore Rd. to Music Lane | 2,3,6 | BS | 1928 | High | 4,6 | 3,800 | 3,800 | 18 | \$436,240.00 | \$186,960.00 | \$623,200 | \$164.00 | 431 |
| 10 | 0237 | _ | AR | Providence | Coventry | Pilgrim Ave., Dexter St. | Tioge Ave. to end of Dexter St. | 2 | BS | 1961 | High | 2 | 1,400 | 1,400 | 10 | \$132,300.00 | \$56,700.00 | \$189,000 | \$135.00 | 405 |
| 11 | 0216 | _ | AR | Providence | Barrington | Metropolitan Park Dr. | Rogers Ave. to Harold St. | 4 | BS | 1925 | High | 4 | 550 | 550 | 7 | \$63,140.00 | \$27,060.00 | \$90,200 | \$164.00 | 371 |
| 12 | 0269 | _ | AR | Providence | East Providence | Pavilion Ave. | Newman Ave. to Bishop Ave. | 4 | CI | 1928 | Low | 6 | 500 | 500 | 9 | \$47,250.00 | \$20,250.00 | \$67,500 | \$135.00 | 320 |
| 13 | 0294 | _ | AR | Providence | East Greenwich | Union St., Marlborough St., Lincoln St. | Main St. to London St. | 2 | BS | 1929 | High | 2 | 1,565 | 1,565 | 26 | \$147,892.50 | \$63,382.50 | \$211,275 | \$135.00 | 320 |
| 14 | 0331 | _ | AR | Providence | Warwick | Long St., Asylum Rd. Area | Bakers Creek Rd. to Keeley Ave. | 2 | BS | 1951 | High | 2,4,6 | 5,380 | 5,380 | 73 | \$564,900.00 | \$242,100.00 | \$807,000 | \$150.00 | 297 |
| 15 | 0332 | _ | AR | Providence | Providence | Melissa St | Hartford Ave. to Barden | 6 | CI | 1912 | Low | 6 | 135 | 135 | 3 | \$15,498.00 | \$6,642.00 | \$22,140 | \$164.00 | 291 |
| 16 | 0404 | _ | AR | Providence | Providence | Pleasant St #107 | Western | 4 | CI | 1876 | Low | - 6 | 217 | 217 | 4 | \$24,911.60 | \$7,117.60 | \$35,588 | \$164.00 | 289 |
| 17 | 0477 | _ | AR | Cumberland | Pawtucket | Jackson St | Roosevelt to High | 3 | CI | 1940 | Low | 6 | 365 | 365 | 5 | \$41,902.00 | \$17,958.00 | \$59,860 | \$164.00 | 285 |
| 18 | 0299 | _ | AR | Providence | Barrington | Markwood Dr. | Remainder of BS off County Rd. | 2 | BS | 1926 | High | 2 | 755 | 755 | 6 | \$79,275.00 | \$33,975.00 | \$113,250 | \$150.00 | 283 |
| 19 | 0403 | _ | AR | Providence | Providence | Colonial Rd #18 | Summit | 4 | CI | 1923 | Low | 6 | 155 | 155 | 3 | \$17,794.00 | \$7,626.00 | \$25,420 | \$164.00 | 275 |
| 20 | 0048 | _ | AR | Providence | East Providence | Warren Ave. | Intersection of Fifth St. | 4 | CI | 1883 | Low | 6 | 100 | 100 | 0 | \$11,480.00 | \$4,920.00 | \$16,400 | \$164.00 | 270 |
| 21 | 0355 | _ | AR | Providence | Johnston | Park and Bend | | 6 | BS | 1957 | High | 2 | 748 | 748 | 8 | \$60,214.00 | \$25,806.00 | \$86,020 | \$115.00 | 260 |
| 22 | 0461 | _ | AR | Providence | East Providence | Hatton | Boyd | 2 | BS | 1965 | High | 2 | 475 | 475 | 6 | \$38,237.50 | \$16,387.50 | \$54,625 | \$115.00 | 253 |
| 23 | 0356 | _ | AR | Providence | Warwick | Sutton | | 2 | BS | 1950 | High | 2 | 286 | 286 | 5 | \$29,029.00 | \$12,441.00 | \$41,470 | \$145.00 | 252 |
| 24 | 0322 | _ | AR | Providence | Coventry | Lantern Lane | Tioge Ave. to end of main | 2 | BS | 1960 | High | 2 | 575 | 575 | 8 | \$60,375.00 | \$25,875.00 | \$86,250 | \$150.00 | 250 |
| 25 | 0351 | _ | AR | Providence | Newport | Pine Street | Washington to Third | 2 | BS | 1909 | Low | 6 | 545 | 545 | 6 | \$62,566.00 | \$26,814.00 | \$89,380 | \$164.00 | 250 |
| 26 | 0401 | _ | AR | Providence | Providence | Warrington | Melrose | 4 | CI | 1917 | Low | 6 | 118 | 118 | 0 | \$13,546.40 | \$5,805.60 | \$19,352 | \$164.00 | 232 |
| 27 | 0446 | _ | AR | Providence | Warwick | Whitford | | 2 | BS | 1955 | High | 2 | 237 | 237 | 3 | \$24,885.00 | \$10,665.00 | \$35,550 | \$150.00 | 232 |
| 28 | 0325 | _ | AR | Providence | Coventry | Briar Point Ave. | Arnold Rd. to end of main | 2 | BS | 1961 | High | 2 | 325 | 325 | 6 | \$34,125.00 | \$14,625.00 | \$48,750 | \$150.00 | 231 |
| 29 | 0224 | _ | AR | Providence | Coventry | Powhatan Ave., Beechwood St. | Osceola Ave. to end of main | 2 | BS | 1967 | High | 2 | 660 | 660 | 6 | \$69,300.00 | \$29,700.00 | \$99,000 | \$150.00 | 227 |
| 30 | 0296 | _ | AR | Providence | Warwick | Namquid Dr., Spring Green Rd. | Algonquin Dr. to Lane 1 | 3 | BS | 1955 | High | 4 | 3,520 | 3,520 | 16 | \$404,096.00 | \$173,184.00 | \$577,280 | \$164.00 | 220 |
| 31 | 0337 | _ | AR | Providence | Warwick | Steele Street and Ardway | W. Shore to Ardway; Meridan, Ardway | 2 | BS | 1929 | High | 2 | 1,419 | 1,419 | 23 | \$148,995.00 | \$63,855.00 | \$212,850 | \$150.00 | 220 |
| 32 | 0470 | _ | AR | Providence | Warwick | Landmark Rd | Red Chimney to #70 | 2 | BS | 1956 | High | 2 | 300 | 300 | 4 | \$31,500.00 | \$13,500.00 | \$45,000 | \$150.00 | 212 |
| 33 | 0336 | _ | AR | Providence | Providence | 54 Smart Street | Milano and Job Intersection | 4 | CI | 1945 | Low | 6 | 285 | 285 | 5 | \$32,718.00 | \$14,022.00 | \$46,740 | \$164.00 | 210 |
| 34 | 0371 | X | PW | Providence | Newport | Park | Broadway to #16 Park | 3 | CI | 1940 | Low | 6 | 378 | 378 | 9 | \$43,394.40 | \$18,597.60 | \$61,992 | \$164.00 | 209 |
| 35 | 0406 | _ | AR | Providence | Cranston | Manor Rd | Brookfield | 2 | BS | 1966 | High | 2 | 572 | 572 | 9 | \$46,046.00 | \$19,734.00 | \$65,780 | \$115.00 | 206 |
| 36 | 0447 | _ | AR | Providence | East Providence | Legion Way | Willet to Becker | 2 | BS | 1951 | High | 2 | 244 | 244 | 1 | \$23,058.00 | \$9,882.00 | \$32,940 | \$135.00 | 205 |
| 37 | 0375 | X | PW | Providence | Newport | Brinley | Catherine to Fillmore | 3 | CI | 1940 | Low | 4 | 267 | 267 | 4 | \$30,651.60 | \$13,136.40 | \$43,788 | \$164.00 | 204 |
| 38 | 0439 | _ | AR | Providence | Coventry | Nancy St | Carolyn to #7 | 2 | BS | 1963 | High | 0 | - | 448 | 1 | \$8,400.00 | \$3,600.00 | \$12,000 | \$26.00 | 201 |
| 39 | 0419 | _ | AR | Providence | Cranston | Harwich Rd | Budlong | 6 | CI | 1957 | Low | 6 | 157 | 157 | 0 | \$18,023.60 | \$7,724.40 | \$25,748 | \$164.00 | 201 |
| 40 | 0329 | _ | AR | Providence | Warwick | Main Ave. | George Arden Ave. to Gorham Ave. | 2,4 | BS | 1928 | High | 2,6 | 705 | 705 | 6 | \$80,934.00 | \$34,686.00 | \$115,620 | \$164.00 | 200 |
| 41 | 0103 | _ | AR | Providence | Providence | Clemence | Weybosset to near Westminster and at Washing | 3 | CI | 1877 | Low | 4 | 245 | 245 | 6 | \$34,300.00 | \$14,700.00 | \$49,000 | \$200.00 | 199 |
| 42 | 0372 | X | PW | Providence | Newport | Atlantic | Marchant to #38 Atlantic | 3 | CI | 1934 | Low | 2 | 275 | 300 | 3 | \$27,912.50 | \$11,962.50 | \$39,875 | \$145.00 | 186 |
| 43 | 0440 | _ | AR | Providence | East Providence | Claire, Booth and Glen | | 2 | BS | 1924 | High | 2 | 1,637 | 1,907 | 44 | \$154,696.50 | \$66,298.50 | \$220,995 | \$135.00 | 185 |
| 44 | 0450 | _ | AR | Providence | Barrington | Sachem Rd. | Redwing | 2 | BS | 1953 | High | 2 | 525 | 525 | 6 | \$49,612.50 | \$21,262.50 | \$70,875 | \$135.00 | 183 |
| 45 | 0502 | _ | AR | Providence | Providence | Wadworth Street | | 4 | CI | 1907 | Low | 6 | 492 | 492 | 11 | \$56,481.60 | \$24,206.40 | \$80,688 | \$164.00 | 171 |
| 46 | 0501 | _ | AR | Providence | Newport | Caswell St | Bliss to end | 2 | BS | 1931 | Low | 6 | 795 | 795 | 11 | \$91,266.00 | \$39,114.00 | \$130,380 | \$164.00 | 170 |
| 47 | 0348 | _ | AR | Providence | East Providence | | Willett to Rogers | 4 | BS | 1925 | High | 4 | 1,339 | 1,339 | 21 | \$149,968.00 | \$64,272.00 | \$214,240 | \$160.00 | 165 |
| 48 | 0453 | _ | AR | Providence | Coventry | Rathbun St | Read to Andrews | 2 | BS | 1961 | High | 2 | 513 | 513 | 6 | \$41,296.50 | \$17,698.50 | \$58,995 | \$115.00 | 164 |

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National Grid - Rhode Island - Gas FY 2010 Accelerated Replacement Program Main & Non-HP Service Replacement Candidates

| | A | В | С | D | E | F | G | Н | I | J | K | L | M | N O | P | Q | R | S | T |
|------------|--------------|--------|----------|--------------------------|-----------------------------|---|---|------------------|------------------|--------------|----------------------|-------------------|-----------------------------|---------------------------------|----------------------------------|-------------------------------------|-----------------------------------|----------------------|------------------------|
| Items | Project # | Paving | Category | <u>Division</u> | Municipality | Location / Street | <u>Project Limits</u> | Exst Diameter | Exst Material | <u>YOI</u> | System Pressure | Relay Diameter | Relay/ Insert Footage | Abandon # of Footage Service | Estimated Loaded Main Cost | Estimated Loaded Service Cost | Total Estimated Loaded Cost | AVG LCost | Prioritiz ation Factor |
| 40 | 0200 | | AR | Providence | Danidasas | Wasterinster Ct Dans Ct Lumas Ct | Carries Dd #7 to #904 Westminster Ct | 10 1 8 0 | CI | 1897 | Low | 10.8.4 | | 1.505 10 | \$172,774.00 | \$74,046.00 | £246.920 | \$164.00 | (<u>Pr)</u> |
| 49 50 | 0306 0408 | | AR | Providence | Providence Barrington | Westminster St, Dean St, Lyman St Salisbury Rd | Service Rd #7 to #861 Westminster St Washington Rd | 12, 4 & 3 | BS | 1941 | High | 12 & 4 | 1,505 906 | 1,505 19 906 13 | \$85,617.00 | \$36,693.00 | \$246,820 \$122,310 | \$135.00 | 156 153 |
| | | | | Providence | | · · · · · · · · · · · · · · · · · · · | | 2 | BS | | _ | 2 | 230 | 230 8 | \$21,735.00 | \$9,315.00 | | \$135.00 | 152 |
| 51 52 | 0354 0445 | | AR | Providence | Barrington Warwick | Allen Ave at Rodeo Oberlin and Tomahawk | Rodeo to end | 2 | BS | 1925 1964 | High | 2 | 961 | 961 9 | \$77,360.50 | \$33,154.50 | \$31,050 \$110,515 | \$135.00 | 152 |
| 52 | 0214 | | AR AR | Providence | Newport | Princeton, Union | Broadway to Almy St. | 2 | BS | 1904 | High Low | 4 | 1,200 | 1,200 14 | \$155,400.00 | \$66,600.00 | \$222,000 | \$185.00 | 150 |
| 54 | 0462 | | AR | Providence | Warwick | Central St , King, West and North | North to King | 2 | BS | 1956 | | 2 | 3,632 | 3,632 51 | \$292,376.00 | \$125,304.00 | \$417,680 | \$115.00 | 150 |
| 55 | 0327 | | AK | Providence | Providence | Randall St. | Charles St. to North Main @ Pettis | 12.6 | CI | 1864 | High Low | 4 | 1420 | 2000 3 | \$163,016.00 | \$69,864.00 | \$232,880 | \$164.00 | 145 |
| 56 | 0443 | | AR | Providence | East Providence | Promenade | Metropoltan Pk to #44 including Shepard | 2 | BS | 1925 | High | 2 | 673 | 673 10 | \$54,176.50 | \$23,218.50 | \$77,395 | \$115.00 | 144 |
| 57 | 0441 | | AR | Providence | Barrington | Fairway & Manor | From Manor to Riverside | 3 | BS | 1938 | High | 2 | 1,470 | 1,470 8 | \$118,335.00 | \$50,715.00 | \$169,050 | \$115.00 | 141 |
| 58 59 | 0353 0420 | | AR AR | Providence | Warwick Coventry/W, War. | Brewster, Edghill, Lakecrest | West to end | 2 | BS BS | 1947 1968 | High | 2 | 4,872 1,050 | 4,872 25 1,050 12 | \$392,196.00 | \$168,084.00 | \$560,280 \$120,750 | \$115.00 | 138 138 |
| 60 | 0350 | | AR | Providence Providence | Barrington | Gough Ave Sherbrook and Greenville | west to end | 2 | BS | 1949 | High High | 2 | 1,450 | 1,450 16 | \$84,525.00 \$116,725.00 | \$36,225.00 \$50,025.00 | \$166,750 | \$115.00 \$115.00 | 137 |
| 61 | 0499 | | AR | Providence | N. Kingstown | Post Rd | #6300 to #6400 | 8 | BS | 1940 | High | - 8 | 1,000 | 1,000 6 | \$126,000.00 | \$54,000.00 | \$180,000 | \$180.00 | 135 |
| 62 | 0505 | | AR | Providence | Warwick | Grenore St | Narragansett to #1 | 4 | CI | 1939 | Low | 6 | 234 | 234 5 | \$26,863.20 | \$11,512.80 | \$38,376 | \$164.00 | 131 |
| 63 | 0360 | | AR | Providence | Warwick | Uphill, Homeland, Ormsby | | 2 | BS | 1949 | High | 2 | 2,345 | 2,345 46 | \$221,602.50 | \$94,972.50 | \$316,575 | \$135.00 | 126 |
| 64 65 | 0407 | х | AR AR | Providence Providence | Warwick Cranston | Roseland Ave Mayfield Ave. | Post Rd Mayfield and Pontiac | 2 | BS BS | 1929 1959 | High | 2 | 2,267 | 2,267 21 | \$41,769.00 \$214,231.50 | \$17,901.00 \$91,813.50 | \$59,670 \$306,045 | \$135.00 \$135.00 | 126 124 |
| 66 | 0364 | А | AR AR | Providence | Barrington | Broadview Dr; Ridgeland to Overlook | Mayrield and Pontiac | 2 | BS | 1959 | High High | 2 | 175 | 175 7 | \$17,762.50 | \$7,612.50 | \$25,375 | \$135.00 | 124 |
| 67 | 0465 | | AR | Providence | Barrington | Appian Way | | 2 | BS | 1925 | High | 2 | 750 | 750 15 | \$60,375.00 | \$25,875.00 | \$86,250 | \$115.00 | 123 |
| 68 | 0333 | | AR | Providence | Providence | Putnam St | Atwells Ave to Kossuth St | 4 | CI | 1873 | Low | 6 | 1190 | 1190 34 | \$136,612.00 | \$58,548.00 | \$195,160 | \$164.00 | 122 |
| 69 | 0454 | X | AR | Providence | Providence | 10 th st and Highland | from N main to nineth | 4 | CI | 1896 | Low | 6 | 260 | 845 21 | \$29,848.00 | \$12,792.00 | \$42,640 | \$164.00 | 121 |
| 70 71 | 0459 0442 | | AR | Providence | Providence Warwick | Job St W Shore and Oakland Beach | #35 to #90 | 6 | BS | 1913 1929 | Low | <u>6</u> 8 | 595 3,167 | 595 6 3,167 21 | \$68,306.00 | \$29,274.00 | \$97,580 \$519,388 | \$164.00 | 121 120 |
| 72 | 0442 | | AR AR | Providence Providence | Warren | Luther St | at Hope | 3 | CI | 1940 | High intermediate | 0 | 3,167 | 36 0 | \$363,571.60 \$3,500.00 | \$155,816.40 \$1,500.00 | \$5,000 | \$164.00 \$139.00 | 120 |
| 73 | 0431 | | AR | Providence | Cranston | West Blue Ridge | Short to W Hamden | 2 | BS | 1959 | High | 2 | 931 | 931 7 | \$74,945.50 | \$32,119.50 | \$107,065 | \$115.00 | 118 |
| 74 | 0460 | | AR | Providence | Cranston | W Hamden Rd | Summit to Park Forest | 2 | BS | 1959 | High | 2 | 726 | 726 10 | \$58,443.00 | \$25,047.00 | \$83,490 | \$115.00 | 117 |
| 75 | 0466 | | AR | Providence | Barrington | | Rumstick to Wildflower | 2 | BS | 1958 | High | 2 | 1,870 | 1,870 21 | \$150,535.00 | \$64,515.00 | \$215,050 | \$115.00 | 116 |
| 76 | 0458 | X | PW | Cumberland | North Smithfield | | Sewer Contract Municipality | 1.5,3,4 | CI | 1940 | Low | 2 | 2,250 | 3,000 31 | \$225,000.00 | \$84,375.00 | \$281,250 | \$125.00 | 115 |
| 77 78 | 0328 | | AR AR | Providence Providence | Coventry Newport | Valley Crest Rd. Howard St, West Howard St | Long Pond Rd. to end of main Spring St to the end of West Howard St | 2.4 | BS CI | 1964 1916 | High Low | 4,6 | 1,400 800 | 1,400 8 800 19 | \$112,700.00 \$91,840.00 | \$48,300.00 \$39,360.00 | \$161,000 \$131,200 | \$115.00 \$164.00 | 115 114 |
| 79 | 0448 | | AR | Providence | Barrington | Nayatt Rd | #284 to Bluff | 6 | BS | 1959 | High | 6 | 1.258 | 1.258 6 | \$144,418.40 | \$61,893.60 | \$206,312 | \$164.00 | 114 |
| 80 | 0357 | | AR | Providence | N. Kingstown | Esmond Cynthia and Eileen | | 2 | BS | 1965 | High | 2 | 3,450 | 3,450 30 | \$277,725.00 | \$119,025.00 | \$396,750 | \$115.00 | 111 |
| 81 | 0397 | | AR | Providence | Cranston | Curtis Street | Cranston St to Metropolitan | 6 | BS | 1958 | Low | 6 | 719 | 719 0 | \$82,541.20 | \$35,374.80 | \$117,916 | \$164.00 | 111 |
| 82 83 | 0463 | | AR | Providence | East Providence | Elinora and Fenner | | 2 | BS | 1925 | High | 2 | 813 | 813 18 | \$65,446.50 | \$28,048.50 | \$93,495 | \$115.00 | 111 |
| 83 84 | 0464 | | AR AR | Providence Providence | Warwick Barrington | Centennial, Greenwich t Weber Nayatt Rd | Watson to #206 | 6 | BS BS | 1961 1941 | High High | 6 | 938 1,673 | 938 12 1,673 9 | \$82,075.00 \$192,060.40 | \$35,175.00 \$82,311.60 | \$117,250 \$274,372 | \$125.00 \$164.00 | 109 106 |
| 85 | 0363 | | AR | Providence | Cranston | Broad St: #2139 to #2160 | ************************************** | 6 | BS | 1960 | Low | - 6 | - | 197 1 | \$7,000.00 | \$3,000.00 | \$10,000 | \$50.00 | 100 |
| 86 | 0273 | X | AR | Providence | Newport | Ayrault St., Everett St., Mann Ave. Area | Broadway to Catherine St. | 2,3,4 | CI | 1900 | Low | 4,6 | 6,545 | 6,545 114 | \$847,577.50 | \$363,247.50 | \$1,210,825 | \$185.00 | 99 |
| 87 | 0382 | X | PW | Providence | Newport | Elm | Washington to Second | 4 | BS | 1954 | Low | 6 | 350 | 350 7 | \$40,180.00 | \$17,220.00 | \$57,400 | \$164.00 | 98 |
| 88 89 | 0349 | | AR | Providence | Barrington | Metropolitan Park Dr. | Harold to Bike Path | 4+2 | BS | 1925 | High | 4+2 | 493 | 493 2 4000 6 | \$56,596.40 | \$24,255.60 | \$80,852 | \$164.00 | 94 94 |
| 90 | 0347 | X | AR PW | Providence Providence | East Providence Newport | Willett Ave Touro St | Rounds to #1061 Willett Washington Sq project | 6 | CI | 1917 1940 | High Low | 6 | 4000 300 | 4000 6 300 8 | \$490,000.00 \$34,440.00 | \$210,000.00 \$14,760.00 | \$700,000 \$49,200 | \$175.00 \$164.00 | 90 |
| 91 | 0396 | X | PW | Providence | Johnston | Atwood Ave | April St to Old Atwood Ave | 8 | BS | 1959 | High | 8 | 2,200 | 2,200 7 | \$284,900.00 | \$122,100.00 | \$407,000 | \$185.00 | 90 |
| 92 | 0451 | | AR | Providence | West Warwick | West St | Including, West, Virginia and Bouchard | 2 | BS | 1968 | High | 2 | 2,129 | 2,129 13 | \$171,384.50 | \$73,450.50 | \$244,835 | \$115.00 | 89 |
| 93 | 0361 | | AR | Providence | Providence | Bowen St | | 20 | CI | 1870 | Low | 20 | 200 | 200 0 | \$28,000.00 | \$12,000.00 | \$40,000 | \$200.00 | 89 |
| 94 | 0478 | | AR | Providence | Providence | Atwells Ave v@ Bradford | | 3 | CI | 1857 | Low | 6 | - | 35 0 | \$3,500.00 | \$1,500.00 | \$5,000 | #DIV/0! | 89 |
| 95 96 | 0444 | X | AR AR | Providence Providence | Warwick Providence | Halsey and Woodstock 5th St | Hope to Summit | 6 | BS CI | 1946 1911 | High Low | 6 | 1,611 1.058 | 1,611 28 929 32 | \$152,239.50 \$121,458.40 | \$65,245.50 \$52,053.60 | \$217,485 \$173,512 | \$135.00 \$164.00 | 87 86 |
| 97 | 0394 | X | PW | Providence | Warwick | Governor Francis Farm Ph 2 | WS6 CPID # | 2 | BS | 1945 | High | 2 | 13.768 | 13,768 125 | \$1,204,700.00 | \$516,300,00 | \$1,721,000 | \$104.00 | 85 |
| 98 | 0395 | X | PW | Providence | Johnston | Atwood Ave | Old Atwood Ave to Rt 6 | 8 | BS | 1959 | High | - 8 | 1,200 | 1,200 7 | \$168,000.00 | \$72,000.00 | \$240,000 | \$200.00 | 85 |
| 99 | 0304 | | AR | Providence | Newport | Houston Ave., Clinton St., Wellington Ave., E | Thames St. to W. Narragansett Ave. | 4,8,12 | CI | 1954 | intermediate | 2 | 1,955 | 1,955 34 | \$224,434.00 | \$96,186.00 | \$320,620 | \$164.00 | 84 |
| 10 | 0338 | X | AR | Providence | | | | 2 | BS | 1929 | High | 2 | 1,637 | 1,637 33 | \$114,590.00 | \$49,110.00 | \$163,700 | \$100.00 | 84 |
| 101 102 | 0378 | X | PW AR | Providence | Newport Providence | Collins Camden St | Broadway to Dr Marcus Wheatland | 1.5 | BS CI | 1954 1872 | Low Low | 6 | 260 595 | 260 3 595 15 | \$29,848.00 \$68,306.00 | \$12,792.00 \$29,274.00 | \$42,640 \$97,580 | \$164.00 \$164.00 | 81 78 |
| 102 | 0476 | X | AK PW | Providence Providence | Newport | Fillmore | Brinley to #1 Tomkins | 1.5 | BS | 1872 | Low | 4 | 595 446 | 595 15 446 5 | \$68,306.00 | \$29,274.00 \$21,943.20 | \$97,580 \$73,144 | \$164.00 \$164.00 | 78 |
| 103 | 0334 | X | PW | Providence | Middletown | Manitiomi | Town sewer program | 4 | CI | 1907 | intermediate | 2 | 25 | 2166 8 | \$24,500.00 | \$10,500.00 | \$35,000 | \$1,400.00 | 76 |
| 105 | 0435 | | AR | Providence | Providence | Kenyon St | Abandonment - America to De Pasquale | 4 | CI | 1885 | Low | 0 | - | 390 0 | \$7,000.00 | \$3,000.00 | \$10,000 | \$25.00 | 76 |
| 106 | 0380 | X | PW | Providence | Newport | Brooks | Broadway to Ledyard | 4 | BS | 1940 | Low | 6 | 694 | 694 13 | \$79,671.20 | \$34,144.80 | \$113,816 | \$164.00 | 75 |
| 107 | 0358 | | AR | Providence | Barrington | South, Foot, Bow and Church | | 2 | BS | 1931 | High | 2 | 3,790 | 3,790 28 | \$397,950.00 | \$170,550.00 | \$568,500 | \$150.00 | 71 |

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National Grid - Rhode Island - Gas FY 2010 Accelerated Replacement Program Main & Non-HP Service Replacement Candidates

| | A | В | C | D | E | F | G | Н | I | J | K | L | M | N | 0 | P | Q | R | S | T |
|-------|-----------|--------|----------|------------|-------------------|-------------------------------------|----------------------------------|------------------|------------------|-------------|--------------------|-------------------|-----------------------------|--------------------|------------------|----------------------------------|-------------------------------|-----------------------------------|-----------|-------------------------------|
| Items | Project # | Paving | Category | Division | Municipality | Location / Street | <u>Project Limits</u> | Exst Diameter | Exst Material | <u> YOI</u> | System Pressure | Relay Diameter | Relay/ Insert Footage | Abandon Footage | # of Services | Estimated Loaded Main Cost | Estimated Loaded Service Cost | Total Estimated Loaded Cost | AVG LCost | Prioritiz t ation Factor (Pr) |
| 108 | 0474 | | AR | Providence | Tiverton | Evans | Riverside to Sakonnet | 3 | BS | 1940 | High | 6 | 1,100 | 1,100 | 6 | \$126,280.00 | \$54,120.00 | \$180,400 | \$164.00 | 70 |
| 109 | 0384 | X | PW | Providence | Newport | Brinley | Kay to Bowler | 4 | CI | 1934 | Low | 4 | 240 | 240 | 2 | \$27,552.00 | \$11,808.00 | \$39,360 | \$164.00 | 67 |
| 110 | 0084 | | AR | Providence | No. Providence | Smithfield Rd. | Lubec St. to #250 Smithfield Rd. | 12 | BS | 1958 | High | 12 | 3,200 | 3,200 | 20 | \$403,200.00 | \$172,800.00 | \$576,000 | \$180.00 | 66 |
| 111 | 0433 | | AR | Providence | Newport | Merton St. | Annadale to #56 Merton | 1.25 | BS | 1945 | Low | 6 | 396 | 396 | 6 | \$45,460.80 | \$19,483.20 | \$64,944 | \$164.00 | 65 |
| 112 | 0016 | | AR | Providence | Coventry | Darton St., Elton St., E. Shore Dr. | Southwest of Tioge Ave. | 2 | BS | 1961 | High | 2 | 952 | 952 | 13 | \$76,636.00 | \$32,844.00 | \$109,480 | \$115.00 | 53 |
| 113 | 0389 | | AR | Providence | Providence | Lincoln | Blackstone to Butler Hospital | 3+6 | CI | 1877 | Low | 2 | 1,400 | 3,700 | 4 | \$98,000.00 | \$42,000.00 | \$140,000 | \$100.00 | 48 |
| 114 | 0434 | | AR | Providence | Middletown | Memorial Dr | Abandonment - Cliff Ave to Wave | 4 | CI | 1931 | Low | 0 | - | 4,233 | 2 | \$10,500.00 | \$4,500.00 | \$15,000 | \$4.00 | 21 |
| | | | | | Total Footage and | Dollars | | | | | | | 134,678 | 146,564 | 1,503 | \$13,779,093 | \$5,889,713 | \$19,668,806 | | |
| | | | | | Miles | | | | | | | | 26 | 28 | | | | | | |