



September 3, 2013

Hon. Kristi Izzo, Secretary
New Jersey Board of Public Utilities
44 South Clinton Avenue, 9th Floor
Trenton, NJ 08625-0350

Re: The Board's Establishment of a Generic
Proceeding to Review Costs, Benefits and
Reliability Impacts of Major Storm Event
Mitigation Efforts
BPU Docket No. AX13030197

New Jersey Natural Gas Company for
Approval of the NJ RISE Program and
Associated Rate Recovery Mechanism
BPU Docket No. GR1309 _____

Dear Secretary Izzo:

Enclosed herewith for filing please find an original and ten (10) copies of the Petition of New Jersey Natural Gas Company (NJNG) with supporting documents seeking approval from the New Jersey Board of Public Utilities (the Board) for the NJ Reinvestment in System Enhancement (NJ RISE) proposal. This submission is being made in response to the Board's Order of March 20, 2013 (Docket No. AX13030197) initiating a proceeding to investigate prudent, cost efficient and effective opportunities to protect New Jersey's utility infrastructure from future major storm events.

Copies of the Petition, including the supporting Exhibits, are also being served upon the New Jersey Division of Rate Counsel and the Division of Law.

Kindly acknowledge receipt of this filing by date stamping the enclosed copy of this letter and returning same in the self-addressed, stamped envelope.

Very truly yours,

A handwritten signature in blue ink that reads 'Tracey Thayer'.

Tracey Thayer
Director, Regulatory Affairs Counsel

Enclosures

C: Service List

THE BOARD'S ESTABLISHMENT OF A GENERIC PROCEEDING TO REVIEW COSTS,
BENEFITS AND RELIABILITY IMPACTS OF MAJOR STORM EVENT MITIGATION EFFORTS
BPU DOCKET NO. AX13030197

NEW JERSEY NATURAL GAS COMPANY FOR APPROVAL OF THE
NJ RISE PROGRAM AND ASSOCIATED RATE RECOVERY MECHANISM
BPU DOCKET NO. GR1309_____

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THE BOARD'S ESTABLISHMENT OF A GENERIC PROCEEDING TO REVIEW COSTS,
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NJ RISE PROGRAM AND ASSOCIATED RATE RECOVERY MECHANISM
BPU DOCKET NO. GR1309_____

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**STATE OF NEW JERSEY
BOARD OF PUBLIC UTILITIES**

IN THE MATTER OF THE PETITION OF
NEW JERSEY NATURAL GAS COMPANY
FOR APPROVAL OF THE NJ RISE PROGRAM
AND ASSOCIATED RATE RECOVERY
MECHANISM

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) BPU DOCKET NO. GR1309 _____
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**STATE OF NEW JERSEY
BOARD OF PUBLIC UTILITIES**

I/M/O THE BOARD’S ESTABLISHMENT OF A)
GENERIC PROCEEDING TO REVIEW COSTS,)
BENEFITS AND RELIABILITY IMPACTS OF) BPU Docket No. AX13030197
MAJOR STORM EVENT MITIGATION EFFORTS)

IN THE MATTER OF THE PETITION OF)
NEW JERSEY NATURAL GAS COMPANY)
FOR APPROVAL OF THE NJ RISE PROGRAM) BPU Docket No. GR1309_____
AND ASSOCIATED RATE RECOVERY)
MECHANISM)

PETITION

**TO: THE HONORABLE COMMISSIONERS OF THE NEW JERSEY
BOARD OF PUBLIC UTILITIES:**

Pursuant to the New Jersey Board of Public Utilities’ (“BPU” or the “Board”) Order in I/M/O the Board’s Establishment Of A Generic Proceeding To Review Costs, Benefits And Reliability Impacts Of Major Storm Event Mitigation Efforts, BPU Docket No. AX13030197 dated March 20, 2013 (“March 20 Order”),¹ New Jersey Natural Gas Company (“NJNG” or the “Company”) hereby requests Board approval for the Company’s capital investments in the NJ Reinvestment In System Enhancement Program (“NJ RISE”) and for associated accounting treatment and rate recovery mechanism pursuant to N.J.S.A. 48:2-21; 48:2-21.1 and 48:2-23 consistent with the Board’s previous approval of the NJNG Accelerated Infrastructure

¹ The March 20 Order also contained a second caption, I/M/O The Board’s Review Of The Petition Of Public Service Electric And Gas Company For Approval Of The Energy Strong Program, BPU Docket Nos. EO13020156, GO13020156.

Investment Program (“AIP”)².

1. NJNG is a corporation duly organized under the laws of the State of New Jersey and is a public utility engaged in the distribution and transportation of natural gas subject to the jurisdiction of the Board with the principal business office located at 1415 Wyckoff Road, Wall, New Jersey 07719. The Company is a local natural gas distribution company providing regulated retail natural gas service to nearly 500,000 customers within Monmouth and Ocean counties, as well as portions of Burlington, Middlesex and Morris counties.

2. Communications and correspondence relating to this filing should be sent to:

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and
Tracey Thayer, Esq., Director, Regulatory Affairs Counsel
New Jersey Natural Gas Company
1415 Wyckoff Road
P. O. Box 1464
Wall, New Jersey 07719
Phone: (732) 938-1214 (M. Sperduto)
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3. NJNG is subject to regulation by the Board for the purposes of assuring that safe, adequate and proper natural gas service pursuant to N.J.S.A. 48:2-23 is provided to its customers. As such, the Company is obligated to and does maintain its public utility infrastructure in such condition as to enable it to meet its regulated obligations to provide the requisite service. That infrastructure is comprised of the property, plant, facilities and equipment within the Company’s natural gas distribution and transmission system throughout its service territory. NJNG is also subject to

² I/M/O/ the Proceeding for Infrastructure Investment and a Cost Recovery Mechanism for All Gas and Electric Utilities and I/M/O/ the Petition of New Jersey Natural Gas Company for Approval of an Accelerated Infrastructure Investment Program and for Approval of Necessary Changes to Gas Rates and Changes in the Company’s Tariff of Gas Service, BPU Docket Nos. EO09010049, GO09010052, GR07110889, and GR10100793.

regulation by the Board for the purposes of setting its retail rates to assure safe, adequate and proper natural gas service, N.J.S.A. 48:2-21 et seq.

4. NJNG hereby submits this Petition pursuant to the Board’s March 20 Order. In its March 20 Order, the Board ordered BPU Staff “...to open a proceeding to evaluate and review all current and future submissions for storm mitigation efforts to be made by each EDC in compliance with the terms of the January 23 Order under a separate sub-docket numbered proceeding.”³ The Board also found that “...it is appropriate to invite all regulated utilities subject to Board jurisdiction, but not parties to the January 23 Order, to submit detailed proposals for infrastructure upgrades designed to protect the State’s utility infrastructure from future Major Storm Events, pursuant to the terms and level of detail requested in the January 23 Order.”

5. This Petition is accompanied by the following Exhibits that are attached hereto and made part of this Petition:

Exhibit P-1 Direct Testimony of Craig A. Lynch, Vice President – Energy Delivery

Exhibit P-2 Description of NJ RISE projects

Exhibit P-3 NJNG Weighted Average Cost of Capital Calculation

Exhibit P-4 A Comparative Balance Sheet and Income Statement for the most recent three-year period; Balance Sheet for the most recent date available; 2012 Revenue from the intrastate sales.⁴

Exhibit P-5 A proposed form of public notice

³ I/M/O Board’s Review of the Utilities’ Response to Hurricane Irene, Order Accepting Consultant’s Report and Additional Staff Recommendations and Requiring Electric Utilities to Implement Recommendations, BPU Docket No. EO11090543 dated January 23, 2013 (“January 23 Order”).

⁴ A Pro Forma Income Statement and Balance Sheet at present and proposed rates will be provided at the time NJNG files an NJ RISE petition for a change in base rates.

BACKGROUND

6. In the last two years, the state has experienced several unprecedented weather events, including Hurricane Irene, the October 2011 snow storm and Superstorm Sandy. Each of these storms caused significant damage across the state. In its March 20 Order, the Board confirmed “In 2011 and 2012 New Jersey was struck by several extraordinary Major Storm Events, which left millions of New Jersey residents without necessary utility service and caused unprecedented damage to the state’s utility infrastructure.” Specifically, Superstorm Sandy caused significant and unprecedented damage to NJNG’s gas infrastructure. In response to this heightened storm activity and the March 20 Order, NJNG is proposing certain infrastructure investments to enhance and improve the Company’s ability to withstand and recover from severe storms.

7. NJNG believes NJ RISE will enhance the Company’s gas infrastructure to make it less susceptible to extreme weather conditions in anticipation of these changing weather patterns and future major storm events. NJ RISE will improve the durability, redundancy, stability and integrity of NJNG’s gas distribution infrastructure, making it better able to withstand the impacts of major storm events, avoiding customer outages and enabling a faster response to customer outages that may occur. NJ RISE capital investments will increase the resiliency of NJNG’s gas distribution system, especially along the barrier islands and other impacted areas of the service territory.

8. Superstorm Sandy was the largest and most severe storm in NJNG’s history, affecting hundreds of thousands of NJNG’S customers and causing widespread destruction in communities across the Company’s service territory, especially in the waterfront areas. Many miles of NJNG’s gas distribution mains were exposed to excessive damage from the storm surge,

resulting in equipment and communication failures at metering and regulating facilities. Extensive water damage from the storm surge occurred in most of waterfront communities in NJNG's service territory.

9. The unprecedented nature of Superstorm Sandy required that the Company curtail natural gas service to approximately 30,000 customers in the heavily-damaged areas of Long Beach Island, and from Bay Head to Seaside Park (the "Seaside Peninsula"). When portions of the infrastructure were torn away from premises, damaging and cracking mains, services, house regulators and meters, natural gas was discharged into the atmosphere. However, following these extreme events, NJNG was able to safely restore service over an eight-week period to almost 30,000 customers capable of receiving natural gas service. As described herein and in Exhibit P-1, the Testimony of Craig A. Lynch ("Lynch Testimony"), NJNG is now proposing capital investments to maximize its ability to be prepared for, respond to and recover from future major storm events through the system hardening and resiliency measures in NJ RISE. System hardening will make the Company's gas infrastructure less susceptible to storm damage caused by soil and beach erosion, storm surge and flooding. Resiliency programs, through the installation of redundant gas mains, will increase the gas distribution system's ability to recover more quickly from storm damage. By accelerating the capital investments for the installation of excess flow valves, safety is enhanced and that work may serve to prevent the need in the future to curtail gas service to customers in vulnerable sections of NJNG's service territory.

10. NJNG is requesting that the Board approve NJ RISE, a comprehensive capital infrastructure enhancement program which involves the investment of approximately \$102.5 million for gas distribution storm hardening and mitigation projects, and associated operation

and maintenance (“O&M”) expenses. NJNG is also requesting Board approval of the accounting treatment and cost recovery as described herein.

DESCRIPTION OF NJ RISE

11. The Company has identified several capital investment projects that will enhance its system in response to a major storm event. As explained in the Lynch Testimony, each of the selected project locations was chosen because either it was directly impacted by Superstorm Sandy or has the potential to be impacted during a major storm event.

Sea Bright Project: The Sea Bright Project involves the installation of approximately 1.5 miles of distribution main into the upper portion of the Sea Bright Peninsula in order to provide a secondary feed to that area from Rumson. The secondary main will improve reliability and integrity while aiding in future restoration efforts through redundancy to an isolated area of the system. The preliminary estimated cost of the Sea Bright Project is \$3.5 million.

North Seaside Project: The North Seaside Project reconfigures the distribution system in that area by moving a regulator station off the island and installing a secondary high pressure main into the upper portion of the Seaside Peninsula in Mantoloking from the mainland distribution system in Brick. There are two potential routes for this new line that will be assessed in a feasibility and route selection study. Relocating the regulator station and relying on an additional new high pressure main will improve reliability and integrity for this portion of the distribution system that serves approximately 20,000 customers. Additionally, any future restoration work following a major storm or extreme weather event will be expedited. The preliminary estimated cost of the North Seaside Project is \$6.0 million.

South Seaside Project: Through the South Seaside Project, NJNG will install a secondary feed from either Toms River or Berkeley Township to the South Seaside Peninsula. Since there are

five alternative routes for the new main, NJNG will assess those options in a feasibility and route selection study. This secondary main will improve reliability, integrity and future restoration efforts through redundancy to an isolated area of the system that serves approximately 20,000 customers. The preliminary estimated cost of the South Seaside Project is \$25 million.

Long Beach Island Project: The Long Beach Island Project involves the installation of approximately 6 miles of new distribution main in order to provide a secondary main to the southern portion of Long Beach Island from the mainland distribution system in Eagleswood or Stafford Townships. This secondary line will improve reliability and integrity while aiding future restoration efforts by providing redundancy to an isolated area of the system that serves approximately 10,000 customers. The preliminary estimated cost of the Long Beach Island Project is \$30.0 million.

Long Beach Island Regulator Station Project: In the Long Beach Island Regulator Station Project, NJNG will fortify and reinforce the existing distribution regulator station in Ship Bottom to reduce the impact of flooding from a future major storm or extreme weather event. NJNG will redesign the station and also install communications equipment. These improvements will improve reliability by securing the regulator station that is essential to providing service to approximately 20,000 customers. The preliminary estimated cost of the Long Beach Island Regulator Station Project is \$3 million.

Excess Flow Valve (“EFV”) Project: The EFV Project represents the installation of approximately 35,000 EFVs in potential storm-affected areas of NJNG’s waterfront communities. The installation of EFVs in these areas provides important safety benefits by reducing the potential for gas venting to the atmosphere when storm damage impacts dwellings or other service disruptions occur. The installation of EFVs improves the safety and reliability of

service to the thousands of customers in these communities. The preliminary estimated cost of the EFV Project is \$35 million.

12. NJNG represents that NJ RISE is consistent with and meets the goals of the Board as set forth in the March 20 Order, specifically to submit detailed proposals to mitigate the impacts to utility systems and customers from future major storm events. The NJ RISE projects set forth herein will mitigate the number of outages, outage duration times, improve service reliability and provide for the creation of incremental jobs.

ACCOUNTING AND COST RECOVERY

Proposed Accounting Treatment for the NJ RISE Program

13. The Company requests that the Board authorize NJNG to utilize the identical accounting treatment previously approved by the Board and agreed to by the New Jersey Division of Rate Counsel (“Rate Counsel”) and Board Staff for NJNG’s infrastructure work in AIP work. Specifically, NJNG will account for all reasonable and prudently-incurred capital investment costs, including but not limited to the costs of engineering, design and construction, property acquisition, labor, materials, other overheads and cost of removal (“Capital Investment Costs”), associated with each of the NJ RISE projects as follows:

(a) Capital Investment Costs for each of the NJ RISE projects will be separately tracked by an NJNG work order in a Construction Work In Progress (“CWIP”) account;

(b) the Company will record a monthly accrual of Allowance for Funds Used During Construction (“AFUDC”) which will be capitalized or included in the CWIP balance as follows:

(i) when the Company's total CWIP balance, including CWIP associated with NJ RISE projects, is less than or equal to the Company's outstanding short-term debt ("S/T debt") balance, the applicable AFUDC rate will be equal to the Company's monthly cost of S/T debt; or

(ii) when the Company's total CWIP balance, including CWIP associated with NJ RISE projects, is greater than the Company's outstanding S/T debt, the applicable AFUDC rate will result in a blended monthly AFUDC calculation. The blended AFUDC rate calculation will include a S/T debt rate for that portion of the CWIP balance equal to the month-end S/T debt balance and the Company's overall weighted-average cost of capital ("WACC"), as defined in Paragraph 13 (d) herein, for the portion of NJ RISE CWIP in excess of NJNG's month-end S/T debt balance. If NJNG has no short-term debt at month end, the AFUDC rate will be the Company's WACC for NJ RISE; or

(iii) when an NJ RISE project is placed into service, but not yet reflected in customer rates, the AFUDC rate will be equal to the Company's WACC.

(c) In determining the CWIP base upon which to apply the AFUDC rate, a deduction will be made for any CWIP amount currently approved for recovery and included in customer base rates; and

(d) The WACC to be used for purposes of calculating AFUDC accruals under the NJ RISE program will be the rate of return most-recently approved for the Company and

authorized by the Board in the Company most recent base rate case.⁵ The WACC as authorized by the Board in the October 3 Order is shown on Exhibit P-3.

Proposed NJ RISE Cost Recovery Mechanism

14. The Company proposes to recover its NJ RISE capital investment project costs and expenses, as described above, and all associated depreciation and incremental O&M expenses, through an annual adjustment to the Company's base rates. This is the same cost recovery mechanism approved by the Board and agreed to by Rate Counsel and Board Staff in the Company's AIP proceeding. The Company will make an annual NJ RISE cost recovery filing with the Board in June of each year with a copy provided to Rate Counsel coincident with but separate from the annual Basic Gas Supply Service ("BGSS") filings. The Company will also provide public notice of any proposed base rate adjustments under the annual NJ RISE cost recovery filing coincident with the requisite notice currently provided to customers for proposed BGSS changes. Following approval by the Board, the annual NJ RISE base rate adjustment will occur separately from, but at the same time as, the effectiveness of the Company's annual BGSS proceedings.

15. The cost estimates included herein for the NJ RISE projects are based on information available at the time of the filing and are not necessarily indicative of the actual costs that will be incurred following the final design, engineering and permitting work that will be done for each project. NJNG will annually file updated information on each project, identifying any necessary changes in the projects. These changes can reflect modifications to the design, permitting or construction timelines and project cost estimates.

⁵ On October 3, 2008, the Board issued its Decision and Order in Docket No. GR07110889, adopting the terms of the Stipulation entered into by NJNG, Board Staff and Rate Counsel. See, *1/M/O The Matter Of The Petition Of New Jersey Natural Gas Company For Approval Of An Increase In Gas Rates, Depreciation Rates For Gas Property, And For Changes In The Tariff For Gas Service Pursuant To N.J.S.A. 48:2-18 and N.J.S.A. 48:2-21* ("October 3 Order").

16. The Company's annual NJ RISE base rate adjustment will include the following elements:

(a) a rate of return on NJNG's investment calculated by multiplying the current CWIP balance, including previously-capitalized AFUDC, or NJNG's plant-in-service balance associated with NJ RISE projects, by NJNG's WACC as described herein in Paragraph 13 (d), including an adjustment for income taxes;

(i) The WACC to be used when calculating the rate of return for NJ RISE cost recovery purposes is shown on Exhibit P-3 and, when adjusted for income taxes, results in a rate of 11.40 percent

(b) depreciation expense, for NJ RISE projects placed into service, based upon NJNG's currently-effective composite depreciation rate of 2.34%, as approved by the Board in the October 3 Order; and

(c) incremental O&M expenses, if any, associated with NJ RISE projects.

17. NJNG's annual NJ RISE base rate adjustment filing will be subject to review by Board Staff and Rate Counsel, prior to the approval and issuance of an Order by the Board establishing that the proposed rates are just and reasonable.

Rate Design

18. NJNG will recover the costs approved in each of its NJ RISE annual filings by adjusting, on a volumetric basis, the then-current base rate for all customer classes, allocated in the manner prescribed in the October 3 Order. Accordingly, the effect of the NJ RISE base rate adjustments, consistent with the October 3 Order, will reflect an across-the-board adjustment to

customer classes that will impact natural gas revenues for each class by the same percentage. No change will be requested in any of the NJ RISE annual filings for the current customer charges approved by the Board in the October 3 Order.

19. The volumes used to determine base volumetric revenues for each customer class and for the NJ RISE-related base rate changes to be coincident with the annual BGSS rate changes, will be based on the weather-normalized forecast for the upcoming annual BGSS period of October through September.

Approval of NJ RISE Is In the Public Interest

20. The activities and costs associated with the reinforcement and expansion of NJNG's utility infrastructure is a critical element in NJNG's overarching responsibility to provide safe and reliable gas distribution service as a public utility in the State of New Jersey. Accordingly, NJNG continuously engages in the construction and maintenance of its infrastructure, including the distribution and transmission property, plant, facilities and equipment that comprise the natural gas system used to serve customers throughout its service territory. The construction projects included herein as elements of NJ RISE are in response to the Board's call for utilities to propose storm hardening and mitigation investments to reinforce and enhance the integrity of their infrastructure in the March 20 Order. Approval of NJ RISE and the associated cost recovery mechanism will serve to minimize the effects of major storm events and allow NJNG to maintain reliability to best serve customers and ensure the continuation of safe, adequate and proper service to customers.

WHEREFORE, NJNG respectfully requests that the Board issue an Order finding that:

- (1) The NJ RISE program is in the public interest and is reasonable and prudent;
- (2) NJNG is authorized to implement and administer the NJ RISE program under the terms set forth in this Petition and accompanying Exhibits;
- (3) the NJ RISE accounting treatment and cost recovery mechanism, pursuant to N.J.S.A. 48:2-21, 48:2-21.1 and 48:2-23, is necessary and proper; and
- (4) grant such other and further relief as may be required.

Respectfully submitted,

New Jersey Natural Gas Company

By 

Tracey Thayer Esq.
Director, Regulatory Affairs Counsel
New Jersey Natural Gas Company

STATE OF NEW JERSEY)
 :
COUNTY OF MONMOUTH)

VERIFICATION

MARK R. SPERDUTO of full age, being duly sworn according to law, on his oath deposes and says:

1. I am Senior Vice President, Regulatory Affairs for New Jersey Natural Gas Company, the Petitioner in the foregoing Petition.

2. I have read the annexed Petition, along with the Exhibits attached thereto, and the matters and things contained therein are true to the best of my knowledge and belief.



Mark R. Spurduto

Sworn and subscribed to
before me this 3rd day
of August 2013



MEREDITH A. MIDDLESTEADT
NOTARY PUBLIC OF NEW JERSEY
Commission Expires 4/30/2014

1 **NEW JERSEY NATURAL GAS COMPANY**

2
3 **PREPARED DIRECT TESTIMONY OF**
4 **CRAIG A. LYNCH**
5

6 **I. INTRODUCTION**

7 **Q. Please state your name, affiliation and business address.**

8 A. My name is Craig A. Lynch and I am Vice-President-Energy Delivery for New Jersey
9 Natural Gas Company (the “Company” or “NJNG”). My business address is 1415
10 Wyckoff Road, Wall, New Jersey 07719.

11 **Q. Please describe your responsibilities as Vice-President-Energy Delivery for New**
12 **Jersey Natural Gas Company.**

13 A. As Vice President-Energy Delivery, I oversee the entire process of maintaining, replacing
14 and expanding NJNG’s transmission and distribution system, the operation of two
15 liquefied natural gas facilities and supervision of meter reading, the storeroom, meter
16 shop, transportation pool and gas control departments.

17 **Q. What is the purpose of your testimony in this proceeding?**

18 A. My testimony describes the proposed capital investment projects that promote enhanced
19 reliability and safety through facility enhancements for storm readiness and response.
20 These projects comprise NJNG’s NJ Reinvestment in System Enhancement (“NJ RISE”).
21 NJ RISE is proposed in conjunction with and in response to the March 20, 2013 Order
22 (“March 20 Order”) of the New Jersey Board of Public Utilities (“BPU”) concerning the
23 investigation into prudent, cost efficient and effective opportunities addressing storm
24 readiness and storm mitigation efforts, Docket No. AX13030197.

25 **Q. Please summarize your conclusions and recommendations.**

26 A. The principal recommendation of my testimony is that NJ RISE, which supports the
27 enhancement of NJNG distribution facilities to provide redundancy and hardening in
28 advance of a major storm event, is operationally prudent and should be implemented.

1 This recommendation is supported by the following conclusions developed in my
2 testimony:

- 3 (1) **NJNG's constructs, operates and maintains its facilities in an**
4 **appropriate manner so as to provide reliable service and maintain**
5 **safety:** Providing safe and reliable service is a foundational element of the
6 Company's commitments to its stakeholders. Following through on this
7 commitment requires substantial operational effort and capital investment
8 to maintain and enhance system safety and integrity.
- 9 (2) **Localized areas of NJNG's system are subject to storm-related**
10 **concerns:** Portions of NJNG's service area are located along the New
11 Jersey shoreline in low-lying areas. The potential for storm-related
12 damage in these areas poses increased operational risks to NJNG, its
13 customers and the communities it serves. These risks include the potential
14 for loss of service, facility damage and undesirable gas leaks in many
15 areas, especially those that are difficult to access during and after major
16 storm events or extreme weather conditions.
- 17 (3) **Additional capital investments related to storm preparedness will**
18 **enhance safety and reliability through system integrity and minimize**
19 **disruptions due to storms or extreme weather events affecting**
20 **waterfront areas served by NJNG:** Targeted investments in projects that
21 are focused on mitigating storm-related risks is appropriate in addition to
22 the Company's regular capital investments. Investments focused on
23 reducing storm-related damages include projects that increase service
24 redundancy, relocate facilities subject to flooding and reduce the potential
25 for gas leaks to the atmosphere during and following storms.
- 26 (4) **NJNG developed a capital investment plan that mitigates weather-**
27 **related risks through targeted facility investments:** The six projects
28 that comprise NJ RISE address areas of the system most vulnerable to
29 storm and weather-related damages. While the Company regularly invests
30 in system facilities to enhance reliability and safety, pursuing the projects
31 reflected in NJ RISE will significantly enhance NJNG's ability to continue

1 to safely operate its system in these areas in the event of a major storm or
2 extreme weather event.

- 3 (5) **The benefits of system enhancement efforts provided through NJ**
4 **RISE are substantial:** Targeted hardening of NJNG's system in potential
5 storm-affected areas mitigates related operational risks and enhances
6 system reliability and safety. The targeted projects included in NJ RISE
7 appropriately balance the need to achieve these benefits with the
8 associated costs. In addition to safety and reliability-related benefits,
9 infrastructure enhancement projects associated with NJ RISE will
10 positively impact New Jersey employment and the State economy.

11 **Q. How is the remainder of your testimony organized?**

- 12 A. My testimony addresses four important topics. Specifically, my testimony describes the
13 Company's existing infrastructure and its extensive efforts to maintain safe and reliable
14 service to customers. Second, I explain the challenges associated with emergency
15 response during major storm events or extreme weather, including lessons learned from
16 the Company's experience responding to Superstorm Sandy. Third, I describe NJ RISE
17 and the benefits associated with the approval and implementation. Finally, I provide an
18 explanation for the preliminary cost estimates associated with NJ RISE.

19 **II. NJNG INFRASTRUCTURE AND OPERATIONAL REQUIREMENTS**

20 **Q. Please provide an overview of NJNG's distribution system.**

- 21 A. NJNG serves approximately 500,000 retail customers in Monmouth, Ocean, Morris,
22 Middlesex and Burlington counties. NJNG's operations are separated into the Northern,
23 Central and Ocean Divisions. The Company's service areas include both inland areas and
24 the waterfront communities in Middlesex, Monmouth, Ocean and Burlington counties.

25 The Company operates a network of 227 miles of large diameter transmission lines,
26 approximately 6,930 miles of distribution mains, and approximately 473,400 service lines
27 that exceed 7,100 miles in total length. NJNG's distribution mains range in diameter from
28 1 1/4 to 16 inches. The distribution system also includes various other forms of
29 infrastructure, including line valves, pressure regulators and meter stations. The network

1 operates in various pressure configurations depending on a variety of factors, including
2 material type and vintage. Specifically, portions of the NJNG system operate at a
3 maximum allowable operating pressure (“MAOP”) of 722 pounds per square inch gauge
4 (“psig”) (transmission mains), while others operate at an MAOP of only 0.25 psig
5 (distribution mains). Finally, the distribution system also consists of two liquefied natural
6 gas (“LNG”) peak shaving facilities that provide important pressure support to the system
7 in addition to serving as storage locations for LNG supplies.

8 **Q. Please describe NJNG’s operational goals and objectives.**

9 A. The safe operation of NJNG’s system is the Company’s primary operational goal. Safety
10 is essential to the health and well-being of the customers, residents and businesses in the
11 communities we serve and the employees who are responsible for operating the system.
12 NJNG also focuses on providing service on a reliable basis to customers who depend on
13 natural gas service for heating and other essential needs. Reliability requires planning to
14 meet the needs of customers during extreme cold weather when demand escalates and
15 peaks, as well as during major storm events. In addition, the Company seeks to achieve
16 the safe and reliable operation of its system in a cost-effective and efficient manner.

17 There are a variety of operational requirements associated with achieving these goals. For
18 instance, one requirement is the ongoing repair and maintenance of existing facilities. A
19 second requirement is the engineering, planning and construction of new facilities to
20 provide for growth and increased operating flexibility, including appropriate operating
21 redundancies. A third requirement is the need to rehabilitate or replace existing facilities
22 to address aging infrastructure concerns or to meet enhanced safety goals, such as the
23 storm readiness objectives as outlined in the March 20 Order in the wake of various
24 major storm and extreme weather-related events. In all aspects of NJNG’s operations, the
25 Company works to continuously improve its operations and adopt best practices of the
26 gas distribution industry.

27 **Q. Has the Company made investments to upgrade and modernize its system?**

28 A. Yes. Over the last five years the Company has invested more than \$310 million in facility
29 enhancements that were not associated with growth to serve new customers. This work

1 includes looping and back feed projects, reinforcements, replacements, retirements,
2 remote control valves and line inspection projects. These capital expenditures include
3 NJNG's efforts to replace system facilities.

4 **Q. Please describe what the term "integrity management" means in relation to the**
5 **operation of local distribution company ("LDC") facilities.**

6 A. Integrity management generally refers to the process of identifying, evaluating and
7 addressing potential or direct threats to system integrity. The Pipeline and Hazardous
8 Materials Administration ("PHMSA"), the agency within the Department of
9 Transportation ("DOT") with primary Federal responsibility for regulation of natural gas
10 pipeline safety, categorizes potential hazards according to the following eight sources:
11 corrosion, natural forces, excavation, other outside force damage, material or welds,
12 equipment, operations and other. Integrity management concentrates on all of these
13 potential threats and requires both management and industry focus in order to maintain
14 safety.

15 **Q. What are NJNG's primary operating procedures associated with integrity**
16 **management?**

17 A. A significant number of the Company's operational systems and procedures are driven by
18 or relate to integrity management. NJNG's corporate philosophy emphasizes the
19 integrity management responsibilities of all employees. In broad terms, this includes the
20 development of systems and procedures that maintain accurate data concerning the
21 location and material of all facilities in the Company's network, periodic inspections and
22 leak surveys, responses to gas leak calls, evaluation of individual leaks, maintenance and
23 repair of facilities, emergency repair, planned replacements and the use of various forms
24 of education to increase public awareness of underground natural gas infrastructure. Each
25 of these broad categories incorporates appropriately detailed activities and reflects
26 dedicated resources and management oversight to support the safe and reliable operation
27 of NJNG's system.

28

1 **Q. Please describe in more detail the planning involved in NJNG's focus on system**
2 **enhancement and maintenance.**

3 A. Planning to successfully address the safety risks associated with operating a natural gas
4 distribution system is multi-faceted. A natural distinction exists between planning for
5 emergency response activities and planning to address non-emergency risks. Planning for
6 emergency response must ensure that adequate levels of construction and maintenance
7 crews, heavy equipment, tools, and materials and supplies stand ready to repair any
8 emergency leaks or other hazards that require immediate attention. Emergency planning
9 must take into account the peak emergency demands that coincide with impacts from
10 major storm events, extreme cold weather and the location of infrastructure in the varied
11 geographical areas of the Company's service territory that spans more than 1,400 square
12 miles. Non-emergency planning entails medium and long-range planning to optimize
13 NJNG's system improvement and leak management efforts. This type of planning is
14 proactive and relies extensively on NJNG's analysis processes. Non-emergency planning
15 also considers the most effective means of potentially reducing the impact of a major
16 storm or weather event while coordinating that work with affected municipalities.

17 **Q. What resources are required to carry out the system enhancement and maintenance**
18 **functions of the Company?**

19 A. NJNG dedicates considerable capital and staffing resources to managing the integrity of
20 its system, reflecting both the importance of and challenges associated with its
21 commitment to safety. The Company's Energy Delivery business unit is the largest
22 within NJNG, both in terms of capital and operations and maintenance ("O&M") budgets
23 and staffing levels. NJNG consistently invests in maintaining and enhancing the safety of
24 its system as described earlier in my testimony, and as reflected in its short and long-term
25 capital budgets. In terms of staffing, the Energy Delivery business unit includes 458
26 NJNG employees and oversees two outside contractor firms performing the majority of
27 NJNG's planned construction activities. Energy Delivery employees are supported by
28 field offices located throughout the service area, as well as the Company's investment in
29 vehicles and equipment necessary to address all needs and operating circumstances.

1 Additionally, a portion of the Energy Delivery staff provides important management,
2 engineering and construction oversight for the business unit.

3 **III. NJNG EMERGENCY RESPONSE ACTIVITIES**

4 **Q. How does NJNG distinguish emergency response situations from other efforts to** 5 **protect public safety?**

6 A. A natural gas-related emergency situation is an event that involves a potential risk to
7 health and safety. All leak calls that come into NJNG are responded to as an emergency
8 situation. During fiscal 2012 (October 1, 2011 through September 30, 2012), NJNG
9 responded to over 25,000 leak calls. In comparison, through July of fiscal 2013 NJNG
10 has already responded to more than 26,000 leak calls. That increase is directly
11 attributable to Superstorm Sandy. While not all leak calls actually involve a leaking
12 facility when investigated, NJNG employees and, if needed, employees from the
13 Company's two alliance contractors will immediately repair or replace the leaking
14 facility should it cause an imminent threat to life or property. Emergency repairs occur
15 in all LDCs and largely result from issues associated with aging infrastructure. In most
16 situations, NJNG is able to maintain gas services to customers in the affected area while
17 the leak is being repaired,

18 **Q. What preparations did NJNG undertake as Superstorm Sandy approached the** 19 **Northeast United States?**

20 A. As Superstorm Sandy traveled up the east coast gaining speed and power, weather
21 forecasters predicted potential damaging effects for the waterfront areas of New Jersey
22 but the exact landfall location could not be determined. The Company closely monitored
23 weather forecasts and prepared for personnel availability to address the potential increase
24 in emergency activities. Three days before Superstorm Sandy started, NJNG issued its
25 first mass communication on October 26, 2013, advising customers and communities
26 how to be safe and prepared should they suspect a natural gas leak has occurred.
27 Management began preparing and ramping up for the storm's potential impact

28 As the storm made landfall on the evening of October 29, 2013, NJNG was prepared with
29 all available operational personnel and equipment to respond to emergency conditions.

1 Now spanning approximately 1,000 miles, Sandy was the largest Atlantic hurricane on
2 record. With wind gusts of 90 mph, a storm surge exceeding 14 feet and widespread
3 flooding, it was the most devastating storm in New Jersey's history. Monmouth and
4 Ocean counties, the heart of NJNG's service territory, were the hardest hit. Homes and
5 businesses were knocked from their foundations, roadways were buried under up to six
6 feet of sand and debris, flooding was so severe that new inlets were created and erosion
7 so extensive that 12-inch distribution mains, once four feet underground, were exposed.
8 The damage was unparalleled and the effects on the region still persist today, even more
9 than ten months after the storm.

10
11 **Q. Please describe the emergency situations related to NJNG's distribution system that**
12 **developed during and after Superstorm Sandy.**

13 A. Storm damage contributed to a high number of individual gas leaks that required
14 immediate response. In the days directly following the storm, NJNG responded to more
15 than 1,600 leak calls, an extremely challenging task since there was great difficulty
16 accessing many waterfront areas because of the extreme flooding and erosion that was
17 compounded by huge piles of sand and debris throughout many areas. Also complicating
18 matters was that fact that electric power had been lost and most forms of communication
19 were severely compromised for several days.

20 **Q. How did NJNG handle the storm-induced challenges attributable to**
21 **Superstorm Sandy?**

22 A. Working around the clock, NJNG employees and mutual aid workers began immediately
23 addressing leak response efforts to safely restore operations and service where possible.
24 Mutual aid was provided by neighboring and out-of-state utilities through established
25 agreements put in place prior to the storm.

26 The situation on the barrier islands proved extremely challenging since access was
27 restricted even for emergency personnel. After gaining access to the most severely
28 affected communities, it was clear that the damage to the system was so severe that the
29 decision was made to curtail service to the Seaside Peninsula and Long Beach Island
30 through depressurizing mains and services. Although such a shut-down is a risky

1 procedure that may lead to water infiltrating the unpressurized distribution system which
2 further complicates and lengthens the process of re-energizing mains, the safety of
3 customers and the emergency workers necessitated that response.

4
5 Restoration of gas service after curtailing service on this scale is a complex undertaking
6 and NJNG began a comprehensive damage assessment to develop a restoration plan. The
7 Company worked aggressively to complete that effort as quickly as possible.
8 Compounding the repair and restoration work were the impending winter weather
9 conditions and the Company's ongoing need to prepare its systems and customer
10 locations to provide service for heating needs.

11 Despite the difficult and extreme conditions, NJNG re-pressurized or replaced 270 miles
12 of main, installed one mile of 12-inch main, addressed 3,600 anomalies, rebuilt or
13 replaced 51,000 meters, completed 121,000 service assessments and restored service to
14 31,000 customers. All of this work was accomplished in less than eight weeks following
15 Superstorm Sandy.

16
17 Throughout this process, NJNG coordinated its efforts with affected municipalities and
18 other essential service providers. Additionally, the Company communicated regularly
19 with customers, community organizations and emergency response personnel, as well as
20 with local, state and federal officials. It was a priority for NJNG to inform all interested
21 parties about the process involved with restoring natural gas service to the affected areas.

22 **Q. Please summarize the lessons learned from these experiences.**

23 A. Restoring gas service following Superstorm Sandy was a difficult and costly effort.
24 Going through the emergency response, assessment and restoration efforts provided
25 NJNG with important first-hand knowledge of possible storm-related threats to its
26 distribution system and the resulting impacts that may occur.

27 One of the important lessons from Superstorm Sandy is that it may be impossible to
28 physically reach portions of NJNG's service territory to access distribution facilities,
29 even for a period of weeks after a major storm or weather event has passed through the

1 area. This has important implications related to the ability of NJNG personnel to address
2 localized safety concerns.

3 A second valuable lesson relates to the importance of excess flow valves (“EFVs”). EFVs
4 installed at the connection between the service line and the distribution main
5 automatically cut off gas flow that exceeds a preset rate of flow. EFVs eliminate the
6 hazardous condition that may occur when escaping gas from customer facilities within
7 the premise or Company facilities outside the premise results in gas build-up at the walls
8 of the home or business. The installation of EFVs was mandated by the Pipeline Integrity,
9 Protection, Enforcement and Safety Act of 2006 and implemented through federal rules.
10 NJNG was an early adopter of EFVs and is a best practices leader in the use of this
11 technology. NJNG has been installing EFVs on new or renewed services since 1994.
12 Even so, the lack of EFVs along areas of the barrier islands and waterfront communities
13 served under older distribution systems led to the situations where gas escaped to the
14 atmosphere. The need to curtail service in those areas could have been lessened if more
15 EFVs were in place.

16 **Q. Have the Company’s experiences responding to Superstorm Sandy affected the**
17 **development of NJ RISE?**

18 A. Yes. The significance of these experiences is the primary factor guiding the development
19 of NJ RISE. Specifically, the potential for localized impacts from major storm events or
20 extreme weather conditions on NJNG’s distribution system are appropriately considered
21 when evaluating the benefits of system improvements and the timing of investments in
22 system improvements. In the case of NJNG, the capital improvement projects focused on
23 potential storm-affected areas through NJ RISE will help minimize damage and service
24 disruptions during a major storm event or extreme weather condition, improving safety,
25 system integrity and reliability. The costs associated with enhancement projects
26 reinforcing the NJNG distribution system and installing EFVs is far less than the
27 incalculable restoration costs that include not only NJNG work but the impacts on and
28 losses incurred by communities, customers and businesses when service is disrupted.

29

1 **Q. What types of investments offer these potential benefits?**

2 A. Beneficial investments include those that may improve NJNG's ability to respond and
3 control the impacts of storm damage including system enhancements and redundancies
4 for isolated areas of the system that are exposed to major storm event and extreme
5 weather-related risks. Additionally, investments in EFVs in these areas provide important
6 safety benefits.

7 **IV. NJ RISE**

8 **Q. Please describe the elements of NJ RISE.**

9 A. NJ RISE is comprised of a group of six targeted system enhancements that present
10 opportunities to improve the NJNG distribution system through storm hardening
11 investments. The six projects are: (1) the Sea Bright Project, (2) the North Seaside
12 Project, (3) the South Seaside Project, (4) the Long Beach Island Project, (5) the Long
13 Beach Island Regulator Station Project and (6) the EFV Project. Further information is
14 provided in Exhibit P-2 in this filing.

15 The criteria for including these projects in NJ RISE is that each contributes to storm
16 readiness and is specifically designed to address major storm event or extreme weather-
17 related risks by hardening the system in targeted areas most likely to be impacted.
18 Additionally, each of the projects represents investments above those included in NJNG's
19 current capital investment plan.

20 **Q. Please describe the Sea Bright Project and its benefits to the system.**

21 A. The Sea Bright Project involves the installation of approximately 1.5 miles of distribution
22 main into the upper portion of the Sea Bright Peninsula in order to provide a secondary
23 feed to that area from Rumson. The secondary main will improve reliability and integrity
24 while aiding in future restoration efforts through redundancy to an isolated area of the
25 system. The preliminary estimated cost of the Sea Bright Project is \$3.5 million.

26 **Q. Please describe the North Seaside Project and its benefits to the system.**

27 A. The North Seaside Project reconfigures the distribution system in that area by moving a
28 regulator station off the island and installing a secondary high pressure main from the

1 mainland distribution system in Brick into the upper portion of the Seaside Peninsula in
2 Mantoloking. There are two potential routes for this new line that will be assessed in a
3 feasibility and route selection study. Relocating the regulator station and relying on an
4 additional new high pressure main will improve reliability and integrity for this portion of
5 the distribution system that serves approximately 20,000 customers. Additionally, any
6 future restoration work following a major storm or extreme weather event will be
7 expedited. The preliminary estimated cost of the North Seaside Project is \$6.0 million.

8 **Q. Please describe the South Seaside Project and its benefits to the system.**

9 A. Through the South Seaside Project, NJNG will install a secondary feed from either Toms
10 River or Berkeley Township to the South Seaside Peninsula. Since there are five
11 alternative routes for the new main, NJNG will assess those options in a feasibility and
12 route selection study. This secondary main will improve reliability, integrity and future
13 restoration efforts through redundancy to an isolated area of the system that serves
14 approximately 20,000 customers. The preliminary estimated cost of the South Seaside
15 Project is \$25 million.

16 **Q. Please describe the Long Beach Island Project and its benefits to the system.**

17 A. The Long Beach Island Project involves the installation of approximately 6 miles of new
18 distribution main in order to provide a secondary main to the southern portion of Long
19 Beach Island from the mainland distribution system in Eagleswood or Stafford
20 Townships. This secondary line will improve reliability and integrity while aiding future
21 restoration efforts by providing redundancy to an isolated area of the system that serves
22 approximately 10,000 customers. The preliminary estimated cost of the Long Beach
23 Island Project is \$30.0 million.

24 **Q. Please describe the Ship Bottom (Long Beach Island) Regulator Station Project and
25 its benefits to the system.**

26 A. In the Long Beach Island Regulator Station Project, NJNG will fortify and reinforce the
27 existing distribution regulator station in Ship Bottom to reduce the impact of flooding
28 from a future major storm or extreme weather event. NJNG will redesign the station and
29 also install communications equipment. These improvements will improve reliability by

1 securing the regulator station that is essential to providing service to customers. The
2 preliminary estimated cost of the Long Beach Island Regulator Station Project is \$3
3 million.

4 **Q. Please describe the Excess Flow Valve (“EFV”) Project and its benefits to the**
5 **system.**

6 A. The EFV Project represents the installation of approximately 35,000 EFVs in potential
7 storm-affected areas of NJNG’s waterfront communities. The installation of EFVs in
8 these areas provides important safety benefits by reducing the potential for gas venting to
9 the atmosphere when storm damage impacts dwellings or other service disruptions occur.
10 The installation of EFVs improves the safety of service to the thousands of customers as
11 well as the reliability of service to all customers in these communities. The preliminary
12 estimated cost of the EFV Project is \$35 million.

13 **Q. How long will it take to complete these projects?**

14 A. NJNG believes that the six projects will be completed over a five-year time frame from
15 the issuance of a BPU Order approving NJ RISE. Once BPU approval is obtained, work
16 will initially begin on the EFV Project. The completion of all necessary engineering,
17 design and permitting work for the other projects will begin following BPU approval.
18 Some of these projects may require special permits from such state agencies as the
19 Department of Environmental Protection since crossing bodies of water is necessary.
20 Once engineering, design and permitting efforts are underway, the Company will
21 prioritize the projects based upon a number of criteria including whether elevated
22 concerns exist in specific areas, the minimization of community impacts, and possible
23 cost saving opportunities that may occur through coordination with municipal work that
24 also involves street openings. As always, the timing of construction activities must also
25 account for winter and summer construction moratoriums in effect for many portions of
26 the Company’s system.

27 **Q. What resources are required to successfully complete the work in NJ RISE?**

28 A. NJNG will continue to utilize outside contractors for a majority of the planned
29 enhancement and replacement work in NJ RISE. Additionally, the Company may

1 increase both external and internal engineering and construction management staff. The
2 independent contractors will require incremental staff and equipment to complete the NJ
3 RISE work as well. This activity will require NJNG to dedicate capital to meet the
4 increased spending levels. NJNG considers the proposed cost recovery mechanism to be
5 an essential component of NJ RISE.

6 **Q. Will the Company provide regular reporting on the projects included within NJ**
7 **RISE?**

8 A. Yes. NJNG will provide an annual report that sets forth all activity undertaken during the
9 applicable twelve-month period. These reports will provide information on the
10 infrastructure replaced and installed, as well as an indication of areas expected to be
11 replaced in the upcoming period.

12 **VI. NJ RISE COST ESTIMATES**

13 **Q. Please describe NJNG's capital budgeting process related to the ongoing safe and**
14 **reliable operation of its distribution and transmission systems.**

15 A. NJNG's normal capital budgeting integrates a number of operation and design
16 considerations, including the results of constant monitoring of the performance and
17 integrity of existing facilities as well as plans for beneficial system improvements. These
18 factors contribute to longer-term plans for specific system upgrade, rehabilitation and
19 replacement projects to maintain safe and reliable operations.

20 On an annual basis prior to the beginning of the fiscal year, NJNG prepares a three-year
21 capital plan that involves the Company's Energy Delivery as well as other business units.
22 Energy Delivery prioritizes its project plans and develops a capital budget based upon
23 system needs, sequencing some of the upgrade, rehabilitation and replacement projects in
24 one of the three years of the capital budget. In addition to the specific larger-scale
25 projects, the Company also budgets for smaller scale capital improvements on a
26 collective or blanket basis. The cost estimates for the large-scale projects and blanket
27 needs are based upon preliminary analysis of the project needs and historical cost data for
28 similar projects.

1 The Energy Delivery three-year capital budget is detailed on a line item basis for large
2 projects and blanket project work. The capital budget is reviewed by NJNG's
3 Management and then submitted to the Board of Directors for approval.

4 **Q. What management controls has NJNG implemented related to its capital budgeting**
5 **process?**

6 A. Appropriate management controls to oversee and contain costs exist across the capital
7 budgeting process. The starting point for these controls is the approval process for each
8 three-year capital budget. All projects must be operationally necessary in order to receive
9 approval for inclusion in the plan.

10 Prior to the commencement of construction on any project, a detailed engineering
11 analysis is performed and a work order package is prepared. The cost estimate reflected
12 in the work order may vary from that reflected in the capital budget due to the more in-
13 depth review of project needs and project-specific cost estimates. For larger projects, the
14 work order cost estimate may reflect consultations with the Company's alliance
15 contractors or the results of bids submitted in response to a limited number of project-
16 specific requests for proposals ("RFPs") from potential contractors. The opening of a
17 work order requires additional management approval(s) even though projects had been
18 previously included in an approved capital budget, adding additional management control
19 over the process. The level of management approval depends on the estimated cost based
20 on the engineering analysis. All projects with an estimated cost of \$2 million or more
21 require approval by various senior management officers, including the Chief Executive
22 Officer.

23 **Q. What is the preliminary estimated cost of NJ RISE?**

24 A. NJNG has preliminarily estimated that the infrastructure investment for the projects
25 associated with NJ RISE is approximately \$102.5 million over five years.

26

1 **Q. How did NJNG develop the preliminary cost estimates for the projects associated**
2 **with NJ RISE?**

3 A. NJNG employed a process similar to that routinely used for the development of a capital
4 budget. The current preliminary project cost estimates are based upon early assessments
5 of project requirements and historical cost information on similar projects to the extent
6 available. NJNG has not performed the requisite engineering analyses or prepared
7 contractor bid packages for any of the NJ RISE projects. The efforts involved in these
8 activities are substantial.

9 **Q. Once the BPU approves NJ RISE, what steps are required prior to initiating**
10 **construction?**

11 A. Consistent with NJNG's annual capital budget process, detailed engineering analyses will
12 be performed to establish a better estimate of individual project costs. The engineering
13 estimates will be considered in the prioritization of projects for the upcoming
14 construction cycle. As the timing to commence construction activities for individual
15 projects approaches, NJNG will meet with Alliance contractors or RFP packages will be
16 prepared and contractor bids solicited. As needed, winning bids will be selected and
17 detailed work orders will be prepared for NJNG management approval.

18 The resulting project costs will vary from the preliminary costs estimates provided here
19 since the results of the engineering studies, permitting and construction timelines, as well
20 as contractor bids and any construction issues that lead to project change orders have to
21 be determined. NJNG will file an annual update to each project identifying changes in the
22 projects and associated estimated costs.

23 **Q. Please describe additional controls applicable to all NJNG capital projects once**
24 **construction has started.**

25 A. Monitoring of all construction activity occurs on a monthly basis. Reports of all open
26 work orders are prepared and include project costs and a percent completion rate to
27 ensure ongoing oversight and cost containment. The Company also employs an
28 appropriate change order process requiring additional project approvals for single events
29 that represent a change of five percent or more of total estimated costs or cumulative

1 events that represent ten percent or more of total project costs. A separate approval
2 process applies to change orders, with the level of approval dependent upon the dollar
3 value of the change. Change orders of \$500,000 or greater require approval of the Chief
4 Executive Officer.

5 **Q. What conclusions can be drawn from the application of NJNG's capital budgeting**
6 **process to the NJ RISE projects?**

7 A. The Company's capital budgeting process is sound and reflects appropriate project
8 management controls to ensure that all capital costs are prudently incurred while
9 contained to the greatest degree possible. Additionally, the process incorporates sufficient
10 oversight, analysis and flexibility to prioritize system needs on an ongoing basis so that
11 safety and reliability are maintained cost-effectively. The application of this process to
12 the NJ RISE projects ensures that the anticipated benefits are achieved at a reasonable
13 cost. NJNG is committed to keeping the BPU and the New Jersey Division of Rate
14 Counsel informed of any changes to estimated project costs so that the intended benefits
15 of NJ RISE are achieved at a reasonable cost.

16 **VI. CONCLUSION**

17 **Q. Please summarize the benefits of the NJ RISE projects.**

18 A. Going through the emergency response, assessment and restoration efforts following
19 Superstorm Sandy provided NJNG with important first-hand knowledge of storm-related
20 threats to its distribution system and the resulting impacts that may occur. The projects
21 incorporated into NJ RISE serve to mitigate those threats. As noted earlier in my
22 testimony, the benefits of the system enhancement projects included in NJ RISE support
23 NJNG's continued ability to provide safe and reliable service. One of the important
24 lessons from Superstorm Sandy is that it may be impossible to physically reach portions
25 of NJNG's service territory to access distribution facilities, even for a period of weeks
26 after a major storm or weather event has passed through the area. The targeted hardening
27 of NJNG's system in localized areas mitigates related operational risks, providing
28 enhanced system reliability and safety. Given the difficulties faced by NJNG, its
29 customers and the communities impacted by Superstorm Sandy, pro-actively addressing

1 possible future storm-related threats to the Company's distribution system minimizes the
2 likelihood and length of service disruptions, as well as the many associated costs.

3 **Q. Does this conclude your prepared direct testimony?**

4 A. Yes, it does.

NJ RISE -- PROJECT DESCRIPTIONS

Project: Sea Bright Reinforcement

Preliminary Cost Estimate: \$3.5 million

Description: This project is the installation of a secondary gas distribution feed into the upper portion of the Sea Bright Peninsula from the current mainland distribution system in Rumson, Monmouth County. The project includes the installation of an approximately 1,000-foot directionally-drilled 12” main crossing of the Shrewsbury River near Rumson Road, and the necessary mainland system reinforcement to include approximately 7,000 feet of 8” main from the river crossing heading west to the area of Rumson Road & Bingham Avenue.

Estimated Start Date: Design 2014 – Permitting 2015

Estimated Complete Date: Construction 2015

Project: North Seaside Reinforcement

Preliminary Cost Estimate: \$6.0 million

Description: This project involves the installation of a secondary gas distribution feed into the upper portion of the Seaside Peninsula in Mantoloking from the mainland distribution system in Brick, Ocean County. A feasibility and route selection study will be required prior to determining exact locations of the proposed crossing of Barnegat Bay. The project includes the installation of an approximately 3,000-foot directionally-drilled 12” main crossing of Barnegat Bay near Mantoloking Road over to the Old Bridge St/Arnold Ave area, and the necessary mainland distribution system reinforcement of approximately 1,500 feet of 12” main from the Barnegat Bay crossing heading west to connect with the existing distribution system ending on Mantoloking Road. The project also includes the relocation of the existing back-up regulator station currently located in Mantoloking onto the mainland, and the fortification of the primary station located in the Mantoloking Shores area of Brick Township. This station work will mitigate flooding and access issues, and reduce/harden the impact on the station’s pressure control and communications equipment.

Estimated Start Date: Design 2014-2015; Permitting 2015-2016

Estimated Complete Date: Construction 2016-2017

Project: South Seaside Reinforcement

Preliminary Cost Estimate: \$25.0 million

Description: This project is the installation of a secondary gas distribution feed into the lower portion of the Seaside Peninsula from the mainland system in either Toms River or Berkeley Township, Ocean County. A feasibility and route selection study will be required prior to determining the possible locations of the proposed crossing. The project includes the installation of an approximately 11,000-foot directionally-drilled 12” or 16” main crossing of the Barnegat Bay from either the Bay Avenue or Route 37 areas in Toms River into Lavallette or Seaside Heights, or from the Bayview Avenue area in Berkeley into Seaside Park. Additionally, necessary mainland distribution system reinforcement is also required in order to connect this

new main with the existing distribution system ranging in length from approximately 11,000 – 22,000 feet depending on the final route and Barnegat Bay crossing location.

Estimated Start Date: Design 2014-2015; Permitting 2015-2016

Estimated Complete Date: Construction 2017-2018

Project: Long Beach Island Reinforcement

Preliminary Cost Estimate: \$30.0 million

Description: This project covers the installation of a secondary gas distribution feed into the southern portion of Long Beach Island from the mainland distribution system in Eagleswood or Stafford Townships. A feasibility and route selection study will be required prior to determining the possible locations of the proposed crossing. The project includes the installation of an approximately 15,000-foot directionally-drilled 12” or 16” main crossing of the Barnegat Bay into the Brant Beach/North Beach Haven sections of Long Beach Township, and the necessary mainland distribution system reinforcement to connect with the existing distribution system of approximately 17,000 feet, depending on the final route and Barnegat Bay crossing location.

Estimated Start Date: Design 2014-2015; Permitting 2015-2016

Estimated Complete Date: Construction 2017-2018

Project: Ship Bottom Station Reinforcement

Preliminary Cost Estimate: \$3.0 million

Description: This project reinforces the existing distribution regulator station located in Ship Bottom Township on Long Beach Island. This project will re-design the station to reduce/harden the impact of flooding on the station’s pressure control and communications equipment.

Estimated Start Date: Design 2014; Permitting 2015

Estimated Complete Date: Construction 2015-2016

Project: Installation of Excess Flow Valves in Storm Affected Areas

Preliminary Cost Estimate: \$35 million

Description: This project involves installing excess flow valves (EFVs) on all services in the coastal communities of the NJNG service territory that currently do not have EFV devices and that may be impacted from coastal and back-bay flooding and/or storm surge. Existing steel services in these areas will be replaced with new plastic services. The project will improve safety and reduce the need to potentially curtail service should a major storm or weather event such as Superstorm Sandy occur. The project will focus on the gas services on Long Beach Island and the Seaside Peninsula initially, followed by other waterfront areas ranging from Old Bridge Township in Middlesex County, south into Little Egg Harbor in Ocean County.

Estimated Start Date: 2014

Estimated Complete Date: 2019

**NEW JERSEY NATURAL GAS COMPANY
WEIGHTED AVERAGE COST OF CAPITAL**

	Amount (\$000)	Percent	Embedded Cost	Weighted Cost	Net of Tax	Pre-Tax
Long-Term Debt	\$411,344	41.63%	5.443%	2.27%	1.34%	2.27%
Short-Term Debt	66,000	6.68%	2.900%	0.19%	0.11%	0.19%
Customers' Deposits	4,447	0.45%	4.790%	0.02%	0.01%	0.02%
Common Equity	506,332	51.24%	10.300%	5.28%	5.28%	8.92%
Total	\$988,123	100.00%		7.76%	6.75%	11.40%

NEW JERSEY NATURAL GAS COMPANY
BALANCE SHEET
AS OF DECEMBER 31, 2012

<u>ASSETS</u>	12/31/2012	12/31/2011	12/31/2010
<u>PROPERTY, PLANT & EQUIPMENT</u>			
UTILITY PLANT, AT COST	\$ 1,602,315	\$ 1,512,646	\$ 1,455,327
CONSTRUCTION WORK IN PROGRESS	122,777	99,595	92,383
TOTAL UTILITY PLANT	1,725,092	1,612,241	1,547,710
ACCUMULATED DEPRECIATION AND AMORTIZATION	(466,349)	(461,407)	(473,518)
NET UTILITY PLANT	1,258,743	1,150,834	1,074,192
<u>CURRENT AND ACCRUED ASSETS</u>			
CASH AND TEMPORARY INVESTMENTS	1,203	2,418	3,071
ACCOUNTS RECEIVABLE	80,803	68,203	20,366
ACCRUED UTILITY REVENUE	53,957	33,335	79,726
ALLOWANCE FOR DOUBTFUL ACCOUNTS	(5,191)	(4,473)	(3,440)
GAS IN STORAGE, AT AVG COST	123,624	134,994	138,517
MATERIALS AND SUPPLIES	10,659	6,384	4,470
DERIVATIVE ASSETS	2,712	2,669	11,424
PREPAYMENTS	6,489	36,219	31,914
	274,256	279,750	286,050
<u>DEFERRED DEBITS</u>			
UNAMORTIZED DEBT EXPENSE	7,381	7,810	6,985
REGULATORY ASSETS	471,761	410,250	415,239
UNRECOVERED PURCHASED GAS COSTS	5,513	(31,078)	24,751
ACCUMULATED DEFERRED TAXES	-	-	2,319
MISC DEFERRED DEBITS	1,109	1,267	1,227
TOTAL NONCURRENT ASSETS	485,764	388,249	450,521
TOTAL ASSETS	\$ 2,018,763	\$ 1,818,833	\$ 1,810,763

Source: BPU Annual Report

NEW JERSEY NATURAL GAS COMPANY
BALANCE SHEET
AS OF DECEMBER 31, 2012

<u>CAPITALIZATION AND LIABILITIES</u>	12/31/2012	12/31/2011	12/31/2010
<u>CAPITALIZATION</u>			
COMMON STOCK EQUITY	\$ 682,801	\$ 658,241	\$ 630,452
LONG-TERM DEBT	329,845	329,845	329,845
TOTAL CAPITALIZATION	<u>1,012,646</u>	<u>988,086</u>	<u>960,297</u>
<u>CURRENT AND ACCRUED LIABILITIES</u>			
NOTES PAYABLE	204,800	74,700	57,000
CURRENT MATURITIES OF L/T DEBT		-	-
CAPITAL LEASE OBLIGATIONS	58,801	59,887	64,665
ACCOUNTS PAYABLE ASSOC COMPANIES	3,902	2,664	2,122
ACCOUNTS PAYABLE AND OTHER	98,267	86,042	95,981
MISC CURRENT AND ACCRUED LIAB	50,582	58,649	68,734
CUSTOMERS DEPOSITS	7,299	7,021	6,344
DIVIDENDS DECLARED	-	15,744	14,867
ACCRUED TAXES AND INTEREST	13,518	(5,964)	15,191
TOTAL CURRENT LIABILITIES	<u>437,168</u>	<u>298,743</u>	<u>324,905</u>
<u>NONCURRENT LIABILITIES</u>			
DEFERRED INCOME TAXES	320,891	295,479	278,104
DEFERRED INVESTMENT TAX CREDITS	2,642	2,793	2,942
CUSTOMER ADVANCES FOR CONSTRUCTION	2,623	2,271	2,601
OTHER DEFERRED CREDITS	60,793	48,561	40,314
OTHER REGULATORY LIABILITY	182,000	182,900	201,600
TOTAL NONCURRENT LIABILITIES	<u>568,949</u>	<u>532,004</u>	<u>525,561</u>
TOTAL CAPITALIZATION AND LIABILITIES	<u>\$ 2,018,763</u>	<u>\$ 1,818,833</u>	<u>\$ 1,810,763</u>

Source: BPU Annual Report

NEW JERSEY NATURAL GAS COMPANY
STATEMENT OF INCOME

	12/31/2012	12/31/2011	12/31/2010
<u>OPERATING REVENUE</u>	<u>\$ 661,116</u>	<u>\$ 885,553</u>	<u>\$ 989,365</u>
<u>OPERATING EXPENSES</u>			
GAS PURCHASES	305,417	514,276	624,156
OPERATION AND MAINTENANCE	151,027	155,396	153,224
DEPRECIATION	35,892	33,550	32,027
TAXES - OTHER THAN INCOME	43,845	55,693	56,847
INCOME TAXES	36,565	41,173	37,365
<u>TOTAL OPERATING EXPENSES</u>	<u>572,745</u>	<u>800,088</u>	<u>903,619</u>
OPERATING INCOME	88,371	85,465	85,746
OTHER INCOME, NET	(878)	2,070	1,734
INTEREST CHARGES, NET	14,737	14,596	16,383
<u>NET INCOME</u>	<u>\$ 72,756</u>	<u>\$ 72,939</u>	<u>\$ 71,097</u>

Source: NJNG BPU ANNUAL REPORT

NEW JERSEY NATURAL GAS COMPANY
BALANCE SHEET
AS OF JUNE 30, 2013

ASSETS

PROPERTY, PLANT & EQUIPMENT

UTILITY PLANT, AT COST	\$ 1,637,084
CONSTRUCTION WORK IN PROGRESS	126,527
TOTAL UTILITY PLANT	<u>1,763,611</u>
ACCUMULATED DEPRECIATION AND AMORTIZATION	(383,155)
NET UTILITY PLANT	<u>1,380,457</u>

CURRENT AND ACCRUED ASSETS

CASH AND TEMPORARY INVESTMENTS	210
ACCOUNTS RECEIVABLE	77,621
ACCRUED UTILITY REVENUE	6,956
ALLOWANCE FOR DOUBTFUL ACCOUNTS	(5,590)
GAS IN STORAGE, AT AVG COST	63,900
MATERIALS AND SUPPLIES	7,813
DERIVATIVE ASSETS	4,496
PREPAYMENTS	5,421
	<u>160,826</u>

DEFERRED DEBITS

UNAMORTIZED DEBT EXPENSE	7,569
REGULATORY ASSETS	447,549
UNRECOVERED PURCHASED GAS COSTS	2,059
ACCUMULATED DEFERRED TAXES	13,090
MISC DEFERRED DEBITS	3,435
TOTAL NONCURRENT ASSETS	<u>473,702</u>

TOTAL ASSETS	<u>\$ 2,014,985</u>
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NEW JERSEY NATURAL GAS COMPANY
BALANCE SHEET
AS OF JUNE 30, 2013

CAPITALIZATION AND LIABILITIES

CAPITALIZATION

COMMON STOCK EQUITY	\$ 700,952
LONG-TERM DEBT	426,173
TOTAL CAPITALIZATION	<u>1,127,125</u>

CURRENT AND ACCRUED LIABILITIES

NOTES PAYABLE	96,000
CURRENT MATURITIES OF L/T DEBT	-
CAPITAL LEASE OBLIGATIONS	36,948
ACCOUNTS PAYABLE ASSOC COMPANIES	2,744
ACCOUNTS PAYABLE AND OTHER	65,055
MISC CURRENT AND ACCRUED LIAB	25,928
CUSTOMERS DEPOSITS	7,079
DIVIDENDS DECLARED	16,579
ACCRUED TAXES AND INTEREST	(11,660)
TOTAL CURRENT LIABILITIES	<u>238,674</u>

NONCURRENT LIABILITIES

DEFERRED INCOME TAXES	328,917
DEFERRED INVESTMENT TAX CREDITS	2,482
CUSTOMER ADVANCES FOR CONSTRUCTION	2,136
OTHER DEFERRED CREDITS	(4,484)
OTHER REGULATORY LIABILITY	320,135
TOTAL NONCURRENT LIABILITIES	<u>649,186</u>

TOTAL CAPITALIZATION AND LIABILITIES	<u>\$ 2,014,985</u>
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NEW JERSEY NATURAL GAS COMPANY
DECEMBER 31, 2012

OPERATING REVENUE:	
RESIDENTIAL	
RESIDENTIAL SERVICE	\$ 395,367
TRANSPORTATION	19,704
COOLING & AIR CONDITIONING	3
COMMERCIAL	
FIRM	79,851
INTERRUPTIBLE	-
TRANSPORTATION	47,505
COOLING & AIR CONDITIONING	312
INDUSTRIAL	
FIRM	-
INTERRUPTIBLE	398
TRANSPORTATION	4,691
COOLING & AIR CONDITIONING	
STREET & YARD LIGHT SERVICE	4
COMPRESSED VEHICLE NATURAL GAS	52
COGENERATION	1
OFF-SYSTEM SALES	<u>113,228</u>
TOTAL	<u>\$ 661,116</u>

Source: BPU Annual Report

NOTICE TO NEW JERSEY NATURAL GAS CUSTOMERS
Docket Nos. AX13030197 and GO1309_____

NOTICE OF FILING AND PUBLIC HEARINGS

TO OUR CUSTOMERS:

PLEASE TAKE NOTICE that on September 3, 2013, New Jersey Natural Gas (NJNG or the Company) filed with the New Jersey Board of Public Utilities (BPU) for approval to implement NJ Reinvestment in System Enhancement (NJ RISE), a series of capital investment projects that promote enhanced reliability and safety through facility enhancements for storm readiness and response. In an Order dated March 20, 2013 (the March 20 Order), the BPU found it critical to investigate prudent, cost efficient and effective opportunities to enhance utility infrastructure against damage from major storm events. NJNG is proposing six projects to be completed over a period of five years following approval by the BPU. Those projects consist of the installation of secondary gas distribution mains into the Sea Bright Peninsula, the Seaside Peninsula and Long Beach Island. Additionally, two regulator station reinforcement projects will be undertaken, one in Mantoloking and the other in Ship Bottom on Long Beach Island. Finally, the Company is proposing to install excess flow valves (EFVs) on all services in waterfront communities that may be impacted by coastal and back-bay flooding and/or storm surge.

At this time, the Company is requesting BPU approval for NJ RISE and, if approved, there is no immediate impact on customers' rates. The Company will submit annual rate filings to recover the capital investment costs associated with NJ RISE.

PLEASE TAKE FURTHER NOTICE that the Board has scheduled public hearings on this petition at the following date, times and place:

Rockaway Township Municipal Bldg
 65 Mt. Hope Road
 Rockaway, NJ 07866

Freehold Township Municipal Building
 One Municipal Plaza, Schank Road
 Freehold, NJ 07728-3099

The public is invited to attend, and interested persons will be permitted to testify and/or make a statement of their views on the proposed increases. In order to encourage full participation in this opportunity for public comment, please submit any requests for needed accommodations, including interpreter, listening devices or mobility assistance, 48 hours prior to these hearings to the Board Secretary at the address below. Regardless of whether they attend the hearing, members of the public may submit written comments concerning the petition to the Board by addressing them to: Kristi Izzo, Secretary, New Jersey Board of Public Utilities, 44 South Clinton Avenue, 9th Floor, P.O. Box 350, Trenton, New Jersey, 08625-0350. Copies of the NJNG filing can be reviewed at the NJNG Customer Service Centers, the addresses of which are located on the NJNG bill, or at the New Jersey Board of Public Utilities, 7th Floor, 44 South Clinton Avenue, P.O. Box 350, Trenton, New Jersey, 08625-0350.

Tracey Thayer, Esq.
New Jersey Natural Gas