

November 30, 2018

BY HAND DELIVERY AND ELECTRONIC MAIL

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

**RE: Docket 4755 – 2018 Energy Efficiency Program Plan
Responses to Division Data Requests – Set 9**

Dear Ms. Massaro:

I have enclosed ten copies of National Grid's¹ responses to Division 9-4, Division 9-6, Division 9-7, Division 9-10, Division 9-13, and Division 9-14 in the above-referenced docket.

This filing also contains a Motion for Protective Treatment of Confidential Information in accordance with Rule 1.2(g) of the Public Utilities Commission's (PUC) Rules of Practice and Procedure and R.I. Gen. Laws § 38-2-2(4)(B). National Grid seeks protection from public disclosure of certain confidential and privileged information, which is contained in its Excel versions of Confidential Attachments DIV 9-13, DIV 9-14-1, DIV 9-14-2, and DIV 9-14-3. In compliance with Rule 1.2(g), National Grid has provided the PUC with one complete, unredacted copy of the confidential materials on USB Flash Drive in a sealed envelope marked **"Contains Privileged and Confidential Materials – Do Not Release."**

This transmittal completes the Company's responses to the Division's Ninth Set of Data Requests in the above-referenced docket.

Thank you for your attention to this filing. If you have any questions, please contact me at 781-907-2121.

Sincerely,



Raquel J. Webster

Enclosures

cc: Docket 4755 Service List
Jon Hagopian, Esq.
John Bell, Division

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

**STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
BEFORE THE PUBLIC UTILITIES COMMISSION**

IN RE: THE NARRAGANSETT ELECTRIC COMPANY)	Docket No. 4755
d/b/a NATIONAL GRID – ELECTRIC AND GAS)	
DISTRIBUTION RATE FILING)	
_____)	

**THE COMPANY’S MOTION
FOR PROTECTIVE TREATMENT OF CONFIDENTIAL INFORMATION**

The Company¹ respectfully requests that the Rhode Island Public Utilities Commission (PUC) provide confidential treatment and grant protection from public disclosure of certain confidential and proprietary information submitted in this proceeding, as permitted by PUC Rule 1.2(g) and R.I. Gen. Laws. § 38-2-2(4)(B). The Company also requests that, pending entry of that finding, the PUC preliminarily grant the Company’s request for confidential treatment pursuant to Rule 1.2(g)(2).

I. BACKGROUND

On November 30, 2018, the Company filed responses to the Rhode Island Division of Public Utilities and Carriers’ (the Division) Ninth Set of Data Requests in Docket 4755 dated October 29, 2018 (Division Set 9). Division Set 9 included: (a) Data Request Division 9-13, which sought an explanation of the proposal that the Navy’s CHP unit be served on Rate 24, and (b) Data Request Division 9-14, which asked the Company to rerun its Contribution in Aid of Construction (CIAC) calculations assuming service to the Navy’s CHP unit on Rate 34 and on Rate 61.

The Company’s response to Data Request Division 9-13 includes Attachment DIV 9-13 Confidential, which is the Company’s Gas Bill and Margin Calculator Model. That model is a

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

confidential and proprietary model developed by the Company that the Company ordinarily would not disclose to the public. The Company seeks confidential treatment of Attachment DIV 9-13 in its entirety.

The Company's response to Data Request Division 9-14 includes Attachment DIV 9-14-1, which is a fuel consumption summary that includes the Navy's historical consumption data, Confidential Attachment DIV 9-14-2, which is another copy of the Company's confidential and proprietary Gas Bill & Margin Calculator, and Attachment DIV 9-14-3, which is an incremental gas distribution revenue summary, which includes data about the Navy's historical actual gas usage. The historical usage information is confidential customer information that the Company ordinarily would not share with the public. The Company has provided both redacted public versions and unredacted confidential versions of Attachment DIV 9-14-1 and Attachment DIV 9-14-3 and is seeking confidential treatment of the unredacted confidential versions. The Company is seeking confidential treatment of Attachment DIV 9-14-2 in its entirety. Therefore, the Company requests that, pursuant to Rule 1.2(g), the PUC afford confidential treatment to Attachment DIV 9-13 in its entirety, the unredacted confidential version of Attachment DIV 9-14-1, Attachment DIV 9-14-2 in its entirety, and the unredacted confidential version of Attachment DIV 9-14-3.

II. LEGAL STANDARD

PUC Rule 1.2(g) provides that access to public records shall be granted in accordance with the Access to Public Records Act (APRA), R.I. Gen. Laws § 38-2-1, *et seq.* Under the APRA, all documents and materials submitted in connection with the transaction of official business by an agency is deemed to be a "public record," unless the information contained in such documents and materials falls within one of the exceptions specifically identified in R.I.

Gen. Laws § 38-2-2(4). Therefore, to the extent that information provided to the PUC falls within one of the designated exceptions to the public records law, the PUC has the authority under the terms of the APRA to deem such information to be confidential and to protect that information from public disclosure.

In that regard, R.I. Gen. Laws § 38-2-2(4)(B) provides that the following types of records shall not be deemed public:

Trade secrets and commercial or financial information obtained from a person, firm, or corporation which is of a privileged or confidential nature.

The Rhode Island Supreme Court has held that this confidential information exemption applies where disclosure of information would be likely either to (1) impair the Government's ability to obtain necessary information in the future; or (2) cause substantial harm to the competitive position of the person from whom the information was obtained. Providence Journal Company v. Convention Center Authority, 774 A.2d 40 (R.I. 2001). Disclosure of information would impair the Government's ability to obtain such information in the future when: (a) information is provided voluntarily to the governmental agency, and (b) that information is of a kind that customarily would not be released to the public by the person from whom it was obtained. Providence Journal, 774 A.2d at 47.

III. BASIS FOR CONFIDENTIALITY

The information contained in Attachment DIV 9-13, the unredacted confidential version of Attachment DIV 9-14-1, Attachment DIV 9-14-2, and the unredacted confidential version of Attachment DIV 9-14-3 falls within the exceptions under the APRA. Specifically, the Gas Bill & Margin Calculator model that comprises Attachment DIV 9-13 and Attachment DIV 9-14-2 is a confidential and proprietary model developed by the Company using significant Company resources. Making this model available to the public would place the Company at a competitive

disadvantage by exposing its confidential internal processes and practices. Further, the unredacted information in Attachment DIV 9-14-1 and Attachment DIV 9-14-3 is confidential customer information about its historical gas consumption. The Company does not and should not reveal this confidential information about its customers, and the Company ordinarily would not share this information with the public.

The Company, therefore, is providing Attachment DIV 9-13, the unredacted confidential version of Attachment DIV 9-14-1, Attachment DIV 9-14-2, and the unredacted confidential version of Attachment DIV 9-14-3 to the PUC on a voluntary basis to assist the PUC with its decision-making in this proceeding, but respectfully requests that the PUC provide confidential treatment to these attachments.

IV. CONCLUSION

Accordingly, the Company respectfully requests that the PUC grant protective treatment to Attachment DIV 9-13 in its entirety, the unredacted confidential version of Attachment DIV 9-14-1, Attachment DIV 9-14-2 in its entirety, and the unredacted confidential version of Attachment DIV 9-14-3.

WHEREFORE, the Company respectfully requests that the PUC grant this Motion for Protective Treatment.

Respectfully submitted,

THE NARRAGANSETT ELECTRIC COMPANY

By its attorney,



Raquel J. Webster, RI Bar # 9064
National Grid
40 Sylvan Road
Waltham, MA 02451
781-907-2121

Dated: November 30, 2018

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4755
In Re: 2018 Energy Efficiency Plan
Notification of an Energy Efficiency Incentive Greater Than \$3,000,000
Responses to the Division's Ninth Set of Data Requests
Issued on October 29, 2018

Division 9-4

Request:

Has the Company evaluated the risk that the temperature could drop unexpectedly such that the 52 HDD is exceeded (creating a 52 HDD that could not be forecasted in advance)? In such case, what steps would need to be taken to assure adequate gas service to Aquidneck Island and the surrounding areas without creating a low-pressure condition that affects pilot lights across the area? Has the Company analyzed the probabilities that this could occur, based on past forecasting experience? If so, please provide and identify the date when this analysis was performed.

Response:

The Narragansett Electric Company d/b/a National Grid (the Company) has considered the risk that the temperature could drop unexpectedly such that the 52 HDD condition is exceeded (creating a 52 HDD condition that could not be forecasted in advance). The Company has not performed an analysis to determine how often this could occur. The Company receives multiple forecasts per day via email and does not store those forecasts in Excel format for ready analysis.

Please see the Company's response to Data Request Division 9-2 for a description of the steps the Company would take to assure adequate gas service to Aquidneck Island and the surrounding areas without creating a low-pressure condition that affects pilot lights across the area if the Navy did not cease operation of the CHP equipment in circumstances where the temperature drops unexpectedly below a 52 HDD condition on a day on which such temperatures were not forecast. Although the Company cannot say for certain how Algonquin Gas Transmission Company (AGT) supply pressures would be affected, based on the example cited in the Company's response to Data Request Division 9-2, which discussed the resilience of the Company's distribution system to lower than normal AGT supply pressures, it is unlikely that a forecast change of a few degrees would have a significant enough impact on distribution system pressures to interrupt service to existing customers on Aquidneck Island.

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Division 9-6

Request:

Referring to the response to Division 6-6, the response states: "[T]he Company understood that it needed to analyze whether additional pipeline capacity was necessary, and did identify the need for the analysis before making the incentive offer. Despite identifying the need for the [gas capacity] analysis, the results of such an analysis were not confirmed before the Company extended the incentive offer." This response states that "the Company" understood the need and identified the need. Please be more specific about who at the Company "understood" and "identified" the need by answering the questions below. (NOTE: Where the questions below seek the identity of employees, the Division is only requesting the identification of position, title, and corporate department at this time, without the names of the employees. If needed, the Division will supplement this request later.):

- (a) Among employees familiar with the fact that the Company was preparing a possible incentive offer for the CHP unit, who among them understood (before the offer was made) that the Company needed to analyze whether additional pipeline capacity was necessary?
- (b) Who first identified the need for the analysis?
- (c) When was the need for the analysis first identified?
- (d) Who at the Company had the expertise and personal knowledge of the actual capacity constraint at the time the incentive offer was made? Was that person or were those persons consulted prior to the incentive offer being made?
- (e) Did anyone make any decisions to overrule or postpone any action on any requests to perform the analysis before the incentive offer was made to the Navy or before the Notification was filed? If so, please identify and explain what happened.
- (f) Were there any internal email communications regarding the need for an analysis before the incentive offer was made or the Notification filed? If so, please provide copies.

Response:

- (a) The following employees were familiar with the fact that the Company was preparing a possible incentive offer for the CHP unit and understood (before the offer was made) that The Narragansett Electric Company d/b/a National Grid (the Company) needed to analyze whether additional pipeline capacity was necessary:
 - Lead Account Manager – Customer Gas Connections
 - Manager – Strategic Sales MA South/RI

Division 9-6, page 2

The Manager – Gas Operations Engineering identified the need to reach out to the Manager – New England (NE) Portfolio Planning to analyze whether additional pipeline capacity was necessary for gas supply but was not familiar with the fact that the Company was preparing an incentive offer for the CHP unit.

The Lead Account Manager – Customer Gas Connections thought that an engineering analysis by Gas Operations Engineering would completely confirm the Company's ability to serve the proposed CHP equipment. Until April 28, 2017, the Lead Account Manager – Customer Gas Connections was not aware that a consultation with NE Portfolio Planning regarding the upstream gas supply portfolio was required as part of the engineering review.

- (b) As part of the Gas Operations Engineering review of the proposed CHP equipment, on April 28, 2017, the Manager – Gas Operations Engineering first identified the need to consult with the Manager – NE Portfolio Planning to determine whether or not the Company's existing upstream gas portfolio could accommodate the proposed CHP equipment.

To provide additional context, the following is a sequence of events related to the engineering analysis of the proposed CHP equipment.

On February 22, 2017, the Lead Account Manager – Customer Gas Connections first identified the need to perform an engineering analysis for the proposed CHP load addition with a general understanding that there were constraints on Aquidneck Island. The Lead Account Manager – Customer Gas Connections did not understand these constraints to be related to upstream pipeline capacity. The Lead Account Manager – Customer Gas Connections was responsible for collecting the proposed gas load and pressure information, submitting a Gas Capacity Request to Gas Operations Engineering, and confirming the Company's ability to provide firm gas service for the proposed CHP equipment. The Lead Account Manager – Customer Gas Connections submitted a Gas Capacity Request to the Associate Engineer – Gas Operations Engineering who was responsible for performing the engineering review. This review was supposed to include a review of the required local distribution system, the required take station capacity, and a consultation with NE Portfolio Planning given that the proposed load for the CHP equipment exceeded 50,000 cfh.

The Associate Engineer who performed the engineering review was a relatively new employee (approximately three months) at the time and was not aware that a consultation

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Division 9-6, page 3

with NE Portfolio Planning was required. On March 31, 2017, the Associate Engineer provided approval of the proposed load contingent upon the installation of a growth main reinforcement and a new service line. Additionally, on April 3, 2017, the Associate Engineer stated that he was consulting Long Term Planning to evaluate how much the supply flow rates and contract maximum daily quantity (MDQ) at the Portsmouth take station would be affected. On April 14, 2017, the Lead Engineer – Long Term Planning confirmed with the Engineer – Pressure Regulation that the Portsmouth take station had adequate capacity to handle the additional load and asked for verification that the Spectra meters and heater capacities would also allow the additional volume.

On April 28, 2017, the Lead Account Manager – Customer Gas Connections informed the Energy Efficiency (EE) Sales team (including the Lead Sales Representative – Strategic Sales RI; the Lead Program Manager – CHP, EE Program Execution; and the Manager – Strategic Sales MA South/RI) that the CHP project could receive firm gas service. On that same day, the Manager – Strategic Sales MA South/RI suggested that the Manager – Gas Operation Engineering be consulted directly to confirm. In an effort to assist with finalizing the engineering review, the Manager – Gas Operations Engineering reached out via email to the Engineer – Pressure Regulation to confirm the Spectra meter capacities and heater capacities at the Portsmouth take station and the Manager – NE Portfolio Planning to determine whether or not the Company's existing upstream gas portfolio could accommodate the proposed CHP equipment. Among those copied on this email were the Associate Engineer – Gas Operations Engineering, the Lead Account Manager – Customer Gas Connections, and the Manager – Strategic Sales MA South/RI. The Manager – NE Portfolio Planning did not provide a response to any of the individuals included on this email communication.

In a response to this email, on May 1, 2017, Pressure Regulation Engineering confirmed that the Portsmouth take station had adequate capacity to flow the added load associated with the CHP equipment, including the Spectra meters and heater capacities at the station.

- (c) Please see the Company's response to part (b) above.
- (d) The Manager – NE Portfolio Planning and Director – Energy Procurement, Gas Supply Planning had the expertise and personal knowledge of the actual capacity constraint at the time the incentive offer was made. Yes, as noted in the Company's response to part (b) above, the Manager – Gas Operations Engineering identified the need to consult with the Manager – NE Portfolio Planning regarding the gas supply portfolio impact

Division 9-6, page 4

and contacted this employee via email on April 28, 2017, a copy of which is provided in Attachment DIV 9-6; however, the Manager – Gas Operations Engineering did not receive a response from the Manager – NE Portfolio Planning nor did the individuals copied on that email identified in the Company's response to part (b) above.

- (e) No. No one made any decisions to overrule or postpone any action related to confirmation of pipeline capacity and gas supply before the incentive offer was made to the Navy or before the Notification was filed. As of May 1, 2017, Gas Operations Engineering had provided its approval of the project contingent on the required scope of the main reinforcement and it had confirmed the necessary take station capacities. Gas Operations Engineering did not suspend its approval of the CHP load pending final review from NE Portfolio Planning. If Gas Operations Engineering had suspended its approval of the CHP load pending final review from NE Portfolio Planning, it would have been clearer to the Lead Account Manager – Customer Gas Connections that the review and approval from NE Portfolio Planning was an outstanding item that was required to be completed for the gas project to move forward. That being said, despite being copied on the email addressed to the Manager – NE Portfolio Planning, the Lead Account Manager – Customer Gas Connections did not follow up with either the Manager – NE Portfolio Planning or the Manager – Gas Operations Engineering to confirm whether or not additional supply questions needed to be answered. Please also refer to the Company's response to part (b) above.
- (f) Please see the internal email communications regarding the need for an analysis by NE Portfolio Planning, provided as Attachment DIV 9-6.

Additionally, the Company is in the process of performing an electronic search for internal emails and presentations between and among the Company employees regarding the need for an analysis before the incentive offer was made or the Notification was filed. The search is being conducted using the following criteria:

- Company Employees: Matt Foran, Stephen Caliri, Elizabeth Arangio, Mark Sevier, Gerald Ferris, Jeff Dunham, Thomas Dion, Fred Paine, Michael Mokey, Faye Brown, and Nancy Culliford
- Search Terms: (Navy or CHP or BQ) and (pipeline or capacity or analysis or Portsmouth or MDQ or supply or Aquidneck or constraint or constrained)
- Timeframe: September 16, 2016 through the present

The Narragansett Electric Company
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Division 9-6, page 5

Once the electronic search is complete and the Company has reviewed any documents identified from the search, the Company will supplement this response with the results.

From: Dion, Thomas
Sent: Wednesday, October 31, 2018 11:19 AM
To: Foran, Matthew A.
Subject: FW: Navy Newport 4500 KW CHP (3)

Thomas Dion C.E.M.
Lead Account Manager- Gas Connections RI
National Grid
280 Melrose St
Providence, RI 02907
P. 401-784-7153
F. 401-406-3434

From: Dion, Thomas
Sent: Friday, February 24, 2017 10:18 AM
To: Paine, Fred; Ferris, Gerald Jr; Mirabile, Gerald J.
Cc: Afonso, Jacques R.
Subject: RE: Navy Newport 4500 KW CHP

Fred,
That is what we will ask Engineering when I get all the info I need.
Tom

Thomas Dion C.E.M.
National Grid
280 Melrose St
Providence, RI 02907
P. 401-784-7153
F. 401-406-3434

From: Paine, Fred
Sent: Friday, February 24, 2017 10:12 AM
To: Dion, Thomas; Ferris, Gerald Jr; Mirabile, Gerald J.
Cc: Afonso, Jacques R.
Subject: RE: Navy Newport 4500 KW CHP

Tom,

Could we supply firm gas with system reinforcements ?

Jed, can we claim savings on a dual fuel CHP ?

From: Dion, Thomas
Sent: Friday, February 24, 2017 10:10 AM
To: Ferris, Gerald Jr; Mirabile, Gerald J.
Cc: Paine, Fred; Afonso, Jacques R.
Subject: RE: Navy Newport 4500 KW CHP

OK, good start, we know where it is going!

How about the CFH input to the CHP?

CFH offset in the Power Plant?

Keep in mind, the Power Plant this is going to be located near, and displacing steam that is supplied by that plant, is NON FIRM.

When the weather hits approx. 20 degrees, we make them switch to alternate fuel oil.

Will the CHP be dual fuel?

If not, and we couldn't supply the existing power plant with firm gas, I do not know how we will supply a CHP with firm gas.

Can you get me some more answers?

Thanks

Tom

Thomas Dion C.E.M.
National Grid
280 Melrose St
Providence, RI 02907
P. 401-784-7153
F. 401-406-3434

From: Ferris, Gerald Jr
Sent: Friday, February 24, 2017 9:49 AM
To: Dion, Thomas; Mirabile, Gerald J.
Cc: Paine, Fred; Afonso, Jacques R.
Subject: RE: Navy Newport 4500 KW CHP

Gerald(Jed) Ferris
NE CHP Program Manager
National Grid
280 Melrose Street
Providence RI 02907
401 784-7364 Work
401 450-9416 Cell
Gerald.ferris@nationalgrid.com

From: Dion, Thomas
Sent: Wednesday, February 22, 2017 2:30 PM
To: Mirabile, Gerald J.
Cc: Paine, Fred; Ferris, Gerald Jr; Afonso, Jacques R.
Subject: Re: Navy Newport 4500 KW CHP

Jerry,

I need the exact location of the proposed CHP.

Also need CFH of new unit and CFH offset of new unit.

If it is offsetting load at the non firm plant we are in trouble.

The unit needs to offset firm load.

We could never supply the non firm plant with firm because of constraints on the island.

We will not be able to add a large load above the non firm.

Tom

Sent from my Mobile Device

On Feb 22, 2017, at 2:24 PM, Mirabile, Gerald J. <Gerald.Mirabile@nationalgrid.com> wrote:

The largest account is non firm on the base. There are a lot of things we will need to sort out. Tom. Let us know what is needed. ??

Jacque, you should be aware of this as well. See email string.

Sent from my iPhone

On Feb 22, 2017, at 2:01 PM, Paine, Fred <Fred.Paine@nationalgrid.com> wrote:

I know it is a very weak spot and I believe we supplement the area with LNG. Please work with Jed to get Tom the incremental gas loads so he can run a study.

From: Mirabile, Gerald J.
Sent: Wednesday, February 22, 2017 1:46 PM
To: Paine, Fred
Cc: Ferris, Gerald Jr; Dion, Thomas
Subject: Re: Navy Newport 4500 KW CHP

Fred, do you know anything about navy base and Gas supply? Tom. Any input historically??

Sent from my iPhone

On Feb 22, 2017, at 7:59 AM, Paine, Fred <Fred.Paine@nationalgrid.com> wrote:

Gerry,

Please get Tom Dion engaged. This is a very very difficult area to supply gas.

From: Ferris, Gerald Jr
Sent: Friday, February 17, 2017 8:44 AM
To: 'naveenk@kengineers.com'
Cc: Paine, Fred
Subject: Navy Newport 4500 KW CHP

Here is the application

https://www.nationalgridus.com/media/pdfs/bus-ways-to-save/custom_ri_retrofit_form_final.pdf

Here is the long drawn out how to do a CHP project.

<https://www.nationalgridus.com/media/pdfs/bus-ways-to-save/a-guide-to-submitting-chp-applications-for-incentives-in-ri-5202016-final.pdf>

A quick summary sheet we just built for it too.

Thanks

Jed

Gerald(Jed) Ferris
NE CHP Program Manager
National Grid
280 Melrose Street
Providence RI 02907
401 784-7364 Work
401 450-9416 Cell
Gerald.ferris@nationalgrid.com

<EE6574 CHP_RI.pdf>

From: Dion, Thomas
Sent: Wednesday, October 31, 2018 11:21 AM
To: Foran, Matthew A.
Subject: FW: Job Design - Engineering Update

Thomas Dion C.E.M.
Lead Account Manager- Gas Connections RI National Grid
280 Melrose St
Providence, RI 02907
P. 401-784-7153
F. 401-406-3434

-----Original Message-----

From: Dion, Thomas
Sent: Friday, March 31, 2017 3:36 PM
To: Flynn, Brandon
Subject: RE: Job Design - Engineering Update

Brandon,
One more thing.
Are we sure about this?
We have always had an issue with bringing the boiler plant at the Navy over to firm gas.
I would have expected much more work needed to supply this Cogen.
3000 feet is not bad.
Can you confirm?
Tom

Thomas Dion C.E.M.
National Grid
280 Melrose St
Providence, RI 02907
P. 401-784-7153
F. 401-406-3434

-----Original Message-----

From: Flynn, Brandon
Sent: Friday, March 31, 2017 3:30 PM
To: Dion, Thomas
Subject: RE: Job Design - Engineering Update

Tom,

This is the same reinforcement. I meant to combine them into one note. It is an explanation of note 1.

Brandon

-----Original Message-----

From: Dion, Thomas
Sent: Friday, March 31, 2017 3:28 PM
To: Flynn, Brandon
Subject: FW: Job Design - Engineering Update

Brandon,
Is

2) Growth Reinforcement: There is a 12 in WS 99psig stub on the intersection of Green End Ave @ Compton View Dr which will be extended with 12 in WS 99psig approx. 3,000 ft parallel with the existing 8 in WS 99psig on Green End Ave to the 12 in WS 99psig stub on the corner of Green End Ave and Aquidneck Ave.

an explanation of 1) ???

Or is this two different Growth Reinforcement's??????

Thomas Dion C.E.M.
National Grid
280 Melrose St
Providence, RI 02907
P. 401-784-7153
F. 401-406-3434

-----Original Message-----

From: noreply@salesforce.com [mailto:noreply@salesforce.com] On Behalf Of Brandon Flynn
Sent: Friday, March 31, 2017 2:45 PM
To: Dion, Thomas
Subject: Job Design - Engineering Update

Engineering Approved GCR for Job Design:
JOB-00053762 for 0 SIMONPIETRI DR BLDG CHP.
<https://na52.salesforce.com/a1Td0000007uare>

Engineering Notes:

BF 3/31/2017

Gas Operations Engineering approves the proposed load of 126,000 CFH contingent upon:

- 1) Growth Reinforcement: Due to the integrity of the 99psig, 35psig, and LP systems in the surrounding locations of this request, the installation of approx. 3,000 ft of 12 in WS 99psig main on Green End Avenue in Middletown RI will be an adequate reinforcement keep all pressures above system minimum and allow the customer to achieve its desired gas capacity request.
- 2) Growth Reinforcement: There is a 12 in WS 99psig stub on the intersection of Green End Ave @ Compton View Dr which will be extended with 12 in WS 99psig approx. 3,000 ft parallel with the existing 8 in WS 99psig on Green End Ave to the 12 in WS 99psig stub on the corner of Green End Ave and Aquidneck Ave.
- 3) After this reinforcement is complete, the installation of up to 100 ft of 8 in WS 99psig service off of the existing 12 in WS 99psig main will be adequate to serve the Boiler Plant.

Please note that these lengths of pipe are approximate and will need to be measured from one 12 in WS 99psig stub to the next 12 in WS 99psig stub on Green End Ave.

BF 3/27/2017

Please attach mapping with location. Opportunity's mapping says 32 mechanic st Woonsocket. No streets in map can be located in smallworld.

Click here to view details of the Job Design in Gridforce:

<https://na52.salesforce.com/a1Td0000007uare>

From: Dion, Thomas
Sent: Wednesday, October 31, 2018 11:21 AM
To: Foran, Matthew A.
Subject: FW: Job Design - Engineering Update

Thomas Dion C.E.M.
Lead Account Manager- Gas Connections RI National Grid
280 Melrose St
Providence, RI 02907
P. 401-784-7153
F. 401-406-3434

-----Original Message-----

From: Dion, Thomas
Sent: Monday, April 03, 2017 1:02 PM
To: Flynn, Brandon
Subject: RE: Job Design - Engineering Update

Thank You!

I am not worried about the service.
8 or 12 does not matter much.
I was just concerned about being able to supply the Navy.
In the past we could not get approval.
It would be great if things have changed.
Thanks
Tom

Thomas Dion C.E.M.
National Grid
280 Melrose St
Providence, RI 02907
P. 401-784-7153
F. 401-406-3434

-----Original Message-----

From: Flynn, Brandon
Sent: Monday, April 03, 2017 12:06 PM
To: Dion, Thomas
Subject: RE: Job Design - Engineering Update

Hi Tom,

I am sorry I didn't get back to you sooner. I am still looking into Portsmouth Take Station and looking to see how much the supply flow rates and contract mdq will be affected. Going to speak with Adnan when he has time. I have been keeping him in the loop with this sales request and reinforcement I came up with. 3000 ft of 12 in CS will help the

system out. I forgot to ask you if you wanted to stay with the 12 in CS service? I approved it with an 8 in service because that was the smallest diameter that could handle the load. I meant to ask you if they planned on adding load in the future? I will keep you informed if I hear anything else from Adnan.

Thank,
Brandon

-----Original Message-----

From: Dion, Thomas
Sent: Friday, March 31, 2017 3:36 PM
To: Flynn, Brandon
Subject: RE: Job Design - Engineering Update

Brandon,
One more thing.
Are we sure about this?
We have always had an issue with bringing the boiler plant at the Navy over to firm gas.
I would have expected much more work needed to supply this Cogen.
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Brandon,
Is

2) Growth Reinforcement: There is a 12 in WS 99psig stub on the intersection of Green End Ave @ Compton View Dr which will be extended with 12 in WS 99psig approx. 3,000 ft parallel with the existing 8 in WS 99psig on Green End Ave to the 12 in WS 99psig stub on the corner of Green End Ave and Aquidneck Ave.
an explanation of 1) ???
Or is this two different Growth Reinforcement's??????

Thomas Dion C.E.M.
National Grid
280 Melrose St
Providence, RI 02907
P. 401-784-7153
F. 401-406-3434

-----Original Message-----

From: noreply@salesforce.com [mailto:noreply@salesforce.com] On Behalf Of Brandon Flynn
Sent: Friday, March 31, 2017 2:45 PM
To: Dion, Thomas
Subject: Job Design - Engineering Update

Engineering Approved GCR for Job Design:
JOB-00053762 for 0 SIMONPIETRI DR BLDG CHP.
<https://na52.salesforce.com/a1Td0000007uare>

Engineering Notes:
BF 3/31/2017

Gas Operations Engineering approves the proposed load of 126,000 CFH contingent upon:

- 1) Growth Reinforcement: Due to the integrity of the 99psig, 35psig, and LP systems in the surrounding locations of this request, the installation of approx. 3,000 ft of 12 in WS 99psig main on Green End Avenue in Middletown RI will be an adequate reinforcement keep all pressures above system minimum and allow the customer to achieve its desired gas capacity request.
- 2) Growth Reinforcement: There is a 12 in WS 99psig stub on the intersection of Green End Ave @ Compton View Dr which will be extended with 12 in WS 99psig approx. 3,000 ft parallel with the existing 8 in WS 99psig on Green End Ave to the 12 in WS 99psig stub on the corner of Green End Ave and Aquidneck Ave.
- 3) After this reinforcement is complete, the installation of up to 100 ft of 8 in WS 99psig service off of the existing 12 in WS 99psig main will be adequate to serve the Boiler Plant.

Please note that these lengths of pipe are approximate and will need to be measured from one 12 in WS 99psig stub to the next 12 in WS 99psig stub on Green End Ave.

BF 3/27/2017

Please attach mapping with location. Opportunity's mapping says 32 mechanic st Woonsocket. No streets in map can be located in smallworld.

Click here to view details of the Job Design in Gridforce:
<https://na52.salesforce.com/a1Td0000007uare>

From: Dion, Thomas
Sent: Wednesday, October 31, 2018 11:22 AM
To: Foran, Matthew A.
Subject: FW: NAVSTA Newport CHP

Thomas Dion C.E.M.
Lead Account Manager- Gas Connections RI National Grid
280 Melrose St
Providence, RI 02907
P. 401-784-7153
F. 401-406-3434

-----Original Message-----

From: Dion, Thomas
Sent: Friday, April 28, 2017 11:08 AM
To: Paine, Fred; Dunham, Jeffrey B.; Ferris, Gerald Jr; Afonso, Jacques R.
Subject: RE: NAVSTA Newport CHP

No, I did not.
I believe Brandon Flynn and Adnan worked on this.
I am pretty sure Brandon spoke to her about the situation.

Thomas Dion C.E.M.
National Grid
280 Melrose St
Providence, RI 02907
P. 401-784-7153
F. 401-406-3434

-----Original Message-----

From: Paine, Fred
Sent: Friday, April 28, 2017 11:02 AM
To: Dion, Thomas; Dunham, Jeffrey B.; Ferris, Gerald Jr; Afonso, Jacques R.
Subject: RE: NAVSTA Newport CHP

Tom,

Did you go directly to Faye ?

-----Original Message-----

From: Dion, Thomas
Sent: Friday, April 28, 2017 10:58 AM
To: Dunham, Jeffrey B.; Ferris, Gerald Jr; Afonso, Jacques R.; Paine, Fred

Subject: NAVSTA Newport CHP

Good morning all,

Based on the comments below, the Navy CHP project can be on firm gas.

It appears the revenue from the new system (must be firm to realize the revenue) will cover the two growth reinforcements below.

We will need an accurate profile of usage to calculate actual CIAC.

But the CIAC should be zero.

I would only like to caution everyone a bit.

We have been looking at the Navy Power Plant for the last 10 years.

I am very surprised we can supply this additional load.

I have asked the questions, and it keeps coming back the same.

Tom

BF 3/31/2017

Gas Operations Engineering approves the proposed load of 126,000 CFH contingent upon:

- 1) Growth Reinforcement: Due to the integrity of the 99psig, 35psig, and LP systems in the surrounding locations of this request, the installation of approx. 3,000 ft of 12 in WS 99psig main on Green End Avenue in Middletown RI will be an adequate reinforcement keep all pressures above system minimum and allow the customer to achieve its desired gas capacity request.
- 2) Growth Reinforcement: There is a 12 in WS 99psig stub on the intersection of Green End Ave @ Compton View Dr which will be extended with 12 in WS 99psig approx. 3,000 ft parallel with the existing 8 in WS 99psig on Green End Ave to the 12 in WS 99psig stub on the corner of Green End Ave and Aquidneck Ave.
- 3) After this reinforcement is complete, the installation of up to 100 ft of 8 in WS 99psig service off of the existing 12 in WS 99psig main will be adequate to serve the Boiler Plant.

Thomas Dion C.E.M.

National Grid

280 Melrose St

Providence, RI 02907

P. 401-784-7153

F. 401-406-3434

-----Original Message-----

From: Dunham, Jeffrey B.

Sent: Friday, April 28, 2017 9:57 AM

To: Ferris, Gerald Jr; Jim Falsetti; Paul Curran; naveen kapur; Afonso, Jacques R.; Dion, Thomas; Reichert, John C CIV NAVFAC MIDLANT, PWD Newport; Carlson, James F CIV NAVFAC MIDLANT, PWD Newport

Cc: Kennedy, John C.; Paine, Fred; Smith, Harmony

Subject: NAVSTA Newport CHP meeting

Jim/John

I have taken over responsibility for this CHP project. Hope all is well and am looking forward to working with you once again.

Folks

I think it would be best to get together and talk this project through to determine who has what for action items and get everyone's questions and concerns on the table. I spoke to Jim Falsetti and he can come to the Navy base for a meeting on Tuesday May 9th at 1PM or Wednesday May 10th at any time. I would plan on a 2 hour time frame for the meeting. Please let me know your availability below for these two days

Jeff Dunham 5/9 1PM 5/10 time?
 1PM 9 till 3

Jim Falsetti 1PM 9 till 3

Jim Carlson

John Reichert

Jed Ferris

Tom Dion

Jacques Afonso

Naveen Kapur

Paul Curran

Jeffrey Dunham
Certified Energy Manager
LEED Accredited Professional (AP)
National Grid
280 Melrose St.
Providence, RI 02907
401-784-7638 Office
401-527-4055 Cell
315-460-8954 Fax

-----Original Message-----

From: Ferris, Gerald Jr
Sent: Thursday, April 27, 2017 5:16 PM
To: Jim Falsetti
Cc: Paul Curran; naveen kapur; Afonso, Jacques R.; Dunham, Jeffrey B.; Paine, Fred; Dion, Thomas; Kennedy, John C.
Subject: RE: EXT || FW: DON Questions for NGrid re: NAVSTA Newport CHP

Hi Jim,

I will pass along your questions to our gas growth folks however; it is difficult to answer your questions when there is no real concrete information provided to answer those question, we are talking generalities at this point? The size CHP has not be determined, the amount of gas needed is not really determined nor the pressures needed.

I cannot answer your CHP incentive questions either until you give us more information in the form of an energy efficiency study or we hire someone to study your thermal and electric load profiles in conjunction with an actual properly sized CHP.

Can I suggest a meeting with our folks and the Navy again to talk about what is needed to take the next step in order for us to answer those attached questions? I have added a few folks to the chain because they all have a stake in helping this project be successful.

Thanks

Jed

Gerald(Jed) Ferris
NE CHP Program Manager
National Grid
280 Melrose Street
Providence RI 02907
401 784-7364 Work
401 450-9416 Cell
Gerald.ferris@nationalgrid.com

-----Original Message-----

From: Jim Falsetti [mailto:jim.falsetti@bqenergy.com]
Sent: Thursday, April 27, 2017 1:28 PM
To: Ferris, Gerald Jr
Cc: Paul Curran; naveen kapur
Subject: EXT || FW: DON Questions for NGrid re: NAVSTA Newport CHP

Dear Jed,

Thanks for the call earlier this week. We are still moving forward, but have been waiting for more definition from the Navy in order to proceed with the correct base case. In response to our requests, they provided this list of natural gas supply questions.

Please review and call me, and we can sort out next steps from there.

Best,

Jim Falsetti www.bqenergy.com Phone/Text 203-512-7446

-----Original Message-----

From: Paul Curran
Sent: Thursday, April 27, 2017 12:48 PM
To: Jim Falsetti <jim.falsetti@bqenergy.com>; Tim Ryan <tim.ryan@bqenergy.com>; Michael McNulty <michael.mcnulty@bqenergy.com>
Subject: FW: DON Questions for NGrid re: NAVSTA Newport CHP

Paul F Curran, PE
Managing Director BQ Energy llc

www.bqenergy.com
office: (845) 473 0300
mobile: (914) 844 0894

47 S Hamilton Street Poughkeepsie, NY 12601

BQ Energy supports the Lets Share the Sun Foundation.

From: Dion, Thomas
Sent: Wednesday, October 31, 2018 11:23 AM
To: Foran, Matthew A.
Subject: FW: U.S Navy JOB-00053762 Growth Reinforcement

Thomas Dion C.E.M.
Lead Account Manager- Gas Connections RI
National Grid
280 Melrose St
Providence, RI 02907
P. 401-784-7153
F. 401-406-3434

From: Dion, Thomas
Sent: Friday, April 28, 2017 2:17 PM
To: Brown, Faye; Culliford, Nancy G. (Marketing); Soroka, Stephen
Cc: Malik, Adnan; Flynn, Brandon; Isgro, Anthony; Caliri, Stephen A.; Day, Alexander J.; Paine, Fred
Subject: RE: U.S Navy JOB-00053762 Growth Reinforcement

Faye,
Thanks for your help.
Just a few more questions.
Did we make upgrades on the island?
Do we still utilize the LNG station on the Navy Base?
Tom

Thomas Dion C.E.M.
National Grid
280 Melrose St
Providence, RI 02907
P. 401-784-7153
F. 401-406-3434

From: Brown, Faye
Sent: Friday, April 28, 2017 2:13 PM
To: Culliford, Nancy G. (Marketing); Soroka, Stephen
Cc: Malik, Adnan; Flynn, Brandon; Isgro, Anthony; Caliri, Stephen A.; Dion, Thomas; Day, Alexander J.; Paine, Fred
Subject: FW: U.S Navy JOB-00053762 Growth Reinforcement

Steve,
The customer group is closer to finalizing this opportunity. Were the meter and heater capacities confirmed? Please let us know.

Nancy,
Navy has a CHP project to add 126 dt/hr. Once we have meter and heater capacities confirmed, what other supply questions do we need answered? Please let us know.

Thank you both.

- Faye Brown
Manager – Gas Operations Engineering
O 781-907-2777
C 617-828-1836

From: Flynn, Brandon
Sent: Friday, April 28, 2017 2:04 PM
To: Brown, Faye
Subject: FW: U.S Navy JOB-00053762 Growth Reinforcement

From: Soroka, Stephen
Sent: Friday, April 14, 2017 2:08 PM
To: Malik, Adnan
Cc: Dion, Thomas; Flynn, Brandon
Subject: Re: U.S Navy JOB-00053762 Growth Reinforcement

Good call. I'll check that as well.

Steve

Sent from my iPhone

On Apr 14, 2017, at 2:07 PM, Malik, Adnan <Adnan.Malik@nationalgrid.com> wrote:

That's correct – this load would be on the 99 psig system and not the 55 psig. Can you verify the Spectra and Grid meters and heater capacity at the station would also allow this additional volume?

Thanks,
Adnan Malik

From: Soroka, Stephen
Sent: Friday, April 14, 2017 2:04 PM
To: Malik, Adnan
Cc: Dion, Thomas; Flynn, Brandon
Subject: RE: U.S Navy JOB-00053762 Growth Reinforcement

Adnan,

Based on data we have, our 5 yr expected peak day flow is 1167mscfh (can you confirm this?). With the added load of 126mscfh (total 1293mscfh), the Portsmouth TS will easily handle the added load. Even with a low inlet pressure of 400# to the station we would be running at 26% capacity. At 750# (full inlet) we are running at 14% capacity.

Is this fed off the 99# system out of Portsmouth TS? If so, we should be all set. Otherwise I'll check the added load against the 60# reg station located in the TS to ensure it will also handle this added load.

Let me know if you need anything else.

Steve

From: Malik, Adnan
Sent: Thursday, April 13, 2017 1:51 PM
To: Soroka, Stephen
Cc: Dion, Thomas; Flynn, Brandon
Subject: RE: U.S Navy JOB-00053762 Growth Reinforcement

Steve – can you check and see if the Portsmouth Take Station can flow an additional 126Dth/hr for sales?

Adnan Malik

From: Dion, Thomas
Sent: Thursday, April 13, 2017 11:30 AM
To: Flynn, Brandon
Cc: Malik, Adnan
Subject: RE: U.S Navy JOB-00053762 Growth Reinforcement

I was waiting for you to confirm we can supply the gas.
In the past we have not been able to supply the boiler plant at the Navy.
I just want to be absolutely sure we can supply the proposed cogen before I run back to the Navy.
Tom

Thomas Dion C.E.M.
National Grid
280 Melrose St
Providence, RI 02907
P. 401-784-7153
F. 401-406-3434

From: Flynn, Brandon
Sent: Thursday, April 13, 2017 11:02 AM
To: Dion, Thomas
Cc: Malik, Adnan
Subject: U.S Navy JOB-00053762 Growth Reinforcement

Tom,

What is the status with this job design? Will they be moving forward with the reinforcement in the near future? Adnan has addressed an issue to me about installing the 12 in WS 99psig main at Aquidneck @ Green End Ave. This intersection needs to be priority when starting the installation of 12 in WS 99psig main. We will need to start the construction at this location and work our way east outside of the intersection down Green End Ave. Please let us know if you have heard anything from the customer about starting the project so we can plan ahead.

Thank you,

Brandon W. Flynn
Associate Engineer, Gas Operations Engineering

nationalgrid

40 Sylvan Rd, Waltham MA

Office: (781) 908-3457

Cell: (508) 850-6881

The Narragansett Electric Company

d/b/a National Grid

RIPUC Docket No. 4755

Attachment DIV 9-6

Page 19 of 26

RE: U.S Navy JOB-00053762 Growth Reinforcement

Soroka, Stephen

Sent: Monday, May 01, 2017 12:52 PM**To:** Dion, Thomas; Brown, Faye; Culliford, Nancy G. (Marketing)**Cc:** Malik, Adnan; Flynn, Brandon; Isgro, Anthony; Caliri, Stephen A.; Day, Alexander J.; Paine, Fred

Faye,

We are all set with regards to the heater capacity, as we are still meet 100%+ capacity with the added flow. This also doesn't represent a problem with regards to Spectra's meter runs.

Let me know if you have any questions.

Steve

From: Dion, Thomas**Sent:** Friday, April 28, 2017 2:17 PM**To:** Brown, Faye; Culliford, Nancy G. (Marketing); Soroka, Stephen**Cc:** Malik, Adnan; Flynn, Brandon; Isgro, Anthony; Caliri, Stephen A.; Day, Alexander J.; Paine, Fred**Subject:** RE: U.S Navy JOB-00053762 Growth Reinforcement

Faye,

Thanks for your help.

Just a few more questions.

Did we make upgrades on the island?

Do we still utilize the LNG station on the Navy Base?

Tom

Thomas Dion C.E.M.

National Grid

280 Melrose St

Providence, RI 02907

P. 401-784-7153

F. 401-406-3434

From: Brown, Faye**Sent:** Friday, April 28, 2017 2:13 PM**To:** Culliford, Nancy G. (Marketing); Soroka, Stephen**Cc:** Malik, Adnan; Flynn, Brandon; Isgro, Anthony; Caliri, Stephen A.; Dion, Thomas; Day, Alexander J.; Paine, Fred**Subject:** FW: U.S Navy JOB-00053762 Growth Reinforcement

Steve,

The customer group is closer to finalizing this opportunity. Were the meter and heater capacities confirmed? Please let us know.

Nancy,

Navy has a CHP project to add 126 dt/hr. Once we have meter and heater capacities confirmed, what other supply questions do we need answered? Please let us know.

Thank you both.

- Faye Brown

Manager – Gas Operations Engineering
O 781-907-2777
C 617-828-1836

From: Flynn, Brandon
Sent: Friday, April 28, 2017 2:04 PM
To: Brown, Faye
Subject: FW: U.S Navy JOB-00053762 Growth Reinforcement

From: Soroka, Stephen
Sent: Friday, April 14, 2017 2:08 PM
To: Malik, Adnan
Cc: Dion, Thomas; Flynn, Brandon
Subject: Re: U.S Navy JOB-00053762 Growth Reinforcement

Good call. I'll check that as well.

Steve

Sent from my iPhone

On Apr 14, 2017, at 2:07 PM, Malik, Adnan <Adnan_Malik@nationalgrid.com> wrote:

That's correct – this load would be on the 99 psig system and not the 55 psig. Can you verify the Spectra and Grid meters and heater capacity at the station would also allow this additional volume?

Thanks,
Adnan Malik

From: Soroka, Stephen
Sent: Friday, April 14, 2017 2:04 PM
To: Malik, Adnan
Cc: Dion, Thomas; Flynn, Brandon
Subject: RE: U.S Navy JOB-00053762 Growth Reinforcement

Adnan,

Based on data we have, our 5 yr expected peak day flow is 1167mscfh (can you confirm this?). With the added load of 126mscfh (total 1293mscfh), the Portsmouth TS will easily handle the added load. Even with a low inlet pressure of 400# to the station we would be running at 26% capacity. At 750# (full inlet) we are running at 14% capacity.

Is this fed off the 99# system out of Portsmouth TS? If so, we should be all set. Otherwise I'll check the added load against the 60# reg station located in the TS to ensure it will also handle this added load.

Let me know if you need anything else.

Steve

From: Malik, Adnan

Sent: Thursday, April 13, 2017 1:51 PM
To: Soroka, Stephen
Cc: Dion, Thomas; Flynn, Brandon
Subject: RE: U.S Navy JOB-00053762 Growth Reinforcement

Steve – can you check and see if the Portsmouth Take Station can flow an additional 126Dth/hr for sales?

Adnan Malik

From: Dion, Thomas
Sent: Thursday, April 13, 2017 11:30 AM
To: Flynn, Brandon
Cc: Malik, Adnan
Subject: RE: U.S Navy JOB-00053762 Growth Reinforcement

I was waiting for you to confirm we can supply the gas.
In the past we have not been able to supply the boiler plant at the Navy.
I just want to be absolutely sure we can supply the proposed cogen before I run back to the Navy.
Tom

Thomas Dion C.E.M.
National Grid
280 Melrose St
Providence, RI 02907
P. 401-784-7153
F. 401-406-3434

From: Flynn, Brandon
Sent: Thursday, April 13, 2017 11:02 AM
To: Dion, Thomas
Cc: Malik, Adnan
Subject: U.S Navy JOB-00053762 Growth Reinforcement

Tom,

What is the status with this job design? Will they be moving forward with the reinforcement in the near future? Adnan has addressed an issue to me about installing the 12 in WS 99psig main at Aquidneck @ Green End Ave. This intersection needs to be priority when starting the installation of 12 in WS 99psig main. We will need to start the construction at this location and work our way east outside of the intersection down Green End Ave. Please let us know if you have heard anything from the customer about starting the project so we can plan ahead.

Thank you,

Brandon W. Flynn
Associate Engineer, Gas Operations Engineering
[nationalgrid](#)
40 Sylvan Rd, Waltham MA
Office: (781) 908-3457
Cell: (508) 850-6881

11/18/2018

RE: U.S Navy JOB-00053762 Growth Reinforcement

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4755
Attachment DIV 9-6
Page 23 of 26

From: Dion, Thomas
Sent: Wednesday, October 31, 2018 11:26 AM
To: Foran, Matthew A.
Subject: FW: EXT || RE: Naval Station Newport CHP Questions

Thomas Dion C.E.M.
Lead Account Manager- Gas Connections RI National Grid
280 Melrose St
Providence, RI 02907
P. 401-784-7153
F. 401-406-3434

-----Original Message-----

From: Dion, Thomas
Sent: Wednesday, January 10, 2018 11:33 AM
To: Sevier, Mark
Cc: Dunham, Jeffrey B.; Ferris, Gerald Jr
Subject: Re: EXT || RE: Naval Station Newport CHP Questions

Good morning all,
The statement by John Reichert is no longer accurate. I submitted the project to engineering for approval. We will need a small system reinforcement, but we can supply the CHP project.
Tom

Sent from my Mobile Device

> On Jan 10, 2018, at 10:12 AM, Sevier, Mark <Mark.Sevier@nationalgrid.com> wrote:
>
> Hi Tom -
>
> Below, John at the Navy says the NGrid gas system can't support their gas demand pre-CHP during cold temps, where in our conversation last summer / fall, I thought you said otherwise, and that NGrid's system could support the post CHP gas demand. Looking at the CHP + duct burner hourly model, I find 142 MMBTU/hr as the maximum gas demand, as seen in the attached.
>
> Can you comment on the minimum available gas supply, or is there any information I can get to help resolve this question?
>
> Thanks,
> Mark
>
> -----Original Message-----
> From: Reichert, John C CIV NAVFAC MIDLANT, PWD Newport
> [mailto:john.reichert@navy.mil]

> Sent: Wednesday, January 10, 2018 8:32 AM
> To: Greg Hester; Sullivan, Daniel L CIV NAVFAC MIDLANT, PWD Newport;
> Kemp, Debra K CIV NAVFAC HQ, AM; Breckner, John K CIV NAVFAC MIDLANT,
> PW; Pascual, Beth A CIV NAVFAC LANT, PW64
> Cc: Dunham, Jeffrey B.; Ferris, Gerald Jr; Sevier, Mark; Jim Falsetti;
> Naveen; Mulhern, Robert CIV NAVFAC MIDLANT, PWD Newport; Smith,
> Elizabeth A CIV NAVFAC MIDLANT, PWD Newport; StLaurent, John R CIV
> NAVFAC MIDLANT, PWD Newport
> Subject: EXT || RE: Naval Station Newport CHP Questions

>
> Bob Mulhern provided the information in the attached email.

>
> Another main point is the requirement from NAVSTA Newport concerning interruptible gas supply: We were told by National Grid that the natural gas supply system operated by National Grid could not support the winter gas requirement for the main steam plant (bldg. 7CC) because of the community demands during cold weather. We typically get curtailed on natural gas supply between 4 to 6 weeks each year which means without a dual fuel capability for the CHP the electrical and heat production would be zero. There is a large cost difference for natural gas purchase between firm gas supply and interruptible gas supply. A firm gas supply as a new account would increase the system requirements for the entire island and gas supply system and the costs charged to NAVSTA would be very high and the benefits (cost and gas load) of the existing interruptible account would be lost. We also have the dual fuel capability as #4 & #2 fuel oil and bulk storage.

>
> The makeup water will be required as a part of the CHP design and the existing system would have to be modified for this purpose. NAVSTA Newport still does not know details about the boilers related to the CHP and any specific requirements for electricity, steam, water, chemicals, size, data, security and controls and makeup water requirements for the CHP.

>
>
> John Reichert, IEM PWD Newport FMD
> PH 401-841-7778, email: john.reichert@navy.mil

>
>
> -----Original Message-----

> From: Greg Hester [mailto:greg.hester@ebdengineering.com]
> Sent: Monday, January 08, 2018 10:52 AM
> To: Sullivan, Daniel L CIV NAVFAC MIDLANT, PWD Newport; Reichert, John
> C CIV NAVFAC MIDLANT, PWD Newport
> Cc: Dunham, Jeffrey B.; Ferris, Gerald; Sevier, Mark; Jim Falsetti;
> Naveen
> Subject: [Non-DoD Source] Naval Station Newport CHP Questions

>
> Good morning Dan and John,

>
>
>
> Jim, Naveen and I have been working with National Grid on the CHP project and they are requesting additional information to update the model to make sure nothing substantial has changed that would affect the benefits of the project. Can you please review the list below and call me at your convenience to discuss?

- > 1. Can you please provide the make and model of the existing steam meters at the boiler plant and when they were last calibrated?
- > 2. Can you confirm if there is a water meter at the boiler plant that can be used to verify makeup water to the boiler system? If so, can you please provide water usage figures?
- > 3. Can you please provide more recent steam metering data for the 7CC boiler plant as the data in the model ended in May 2016? The data previously provided included steam flow per boiler as well as steam flow to the deaerator
- > 4. Can you please provide #2 and #4 monthly fuel oil usage for the 7CC boiler plant for all of 2016 and 2017 to date?
- > 5. Can you please provide the minimum steaming rate for boiler #4 when fired on natural gas?

>
>
>

> Thank you both for your assistance.

>
>
>

> Regards,

>
>
>

> Gregory S. Hester, PE LEED AP

>
>
>
>
>

> 31-33 North Main Street – Unit 31A

>

> Marlborough, CT 06447

>

> 860-295-3220 O

>

> 860-883-6486 C

>

> Greg.Hester@EBDEngineering.com

>

> www.ebdengineering.com <<http://www.ebdengineering.com>>

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>

> <navy est hourly gas demand.docx>

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4755
In Re: 2018 Energy Efficiency Plan
Notification of an Energy Efficiency Incentive Greater Than \$3,000,000
Responses to the Division's Ninth Set of Data Requests
Issued on October 29, 2018

Division 9-7

Request:

Attachment Division 4-1 (provided to the Division on October 11, 2018) contains an email exchange between the Company and the Navy taking place on January 10, 2018, prior to the Company sending the incentive offer letter to the Navy. (Attachment 4-1, pp. 779-80) The email exchange shows the Navy specifically raising the question of how National Grid could provide firm service in light of what the Navy had been told in the past. It states in part:

“Another main point is the requirement from NAVSTA Newport concerning interruptible gas supply: We were told by National Grid that the natural gas supply system operated by National Grid could not support the winter gas requirement for the main steam plant (bldg.. 7CC) because of the community demands during cold weather. . . . A firm gas supply as a new account would increase the system requirements for the entire island . . .”

A company employee responded:

“I asked about NGrid gas service for the proposed Navy CHP plant, and was told that NGrid will be able to serve the proposed CHP plant winter gas load with a small system reinforcement, so my understanding is that the Navy's main steam plant will not need to continue to be interruptible from NGrid's perspective.”

- (a) Why did the Company misinform the Navy that firm gas service was available and the existing plant would no longer need interruptible service?
- (b) Was an analysis performed before the answer was given to the Navy?
- (c) Was anyone else at the Company (not included on the email) aware that the employee who sent this email to the Navy was giving this answer? If so, please identify the person(s)' position, title, and department.

Please provide any internal communications, if any, between the employee who sent the email and others at the Company about the Navy's inquiry before the email was sent.

Response:

- (a) The person who provided this information to the Navy misunderstood communications provided to him regarding The Narragansett Electric Company d/b/a National Grid's (the Company) ability to provide firm gas service to the Navy at its existing plant.

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4755
In Re: 2018 Energy Efficiency Plan
Notification of an Energy Efficiency Incentive Greater Than \$3,000,000
Responses to the Division's Ninth Set of Data Requests
Issued on October 29, 2018

Division 9-7, page 2

Prior to responding to the Navy's question, the Senior Engineer – EE Technical Sales Support NE asked the Lead Account Manager – Customer Gas Connections the following question:

“Below, John at the Navy says the NGrid gas system can't support their gas demand pre-CHP during cold temps, where in our conversation last summer / fall, I thought you said otherwise, and that NGrid's system could support the post CHP gas demand.... Can you comment on the minimum available gas supply, or is there any information I can get to help resolve this question?”

The Lead Account Manager – Customer Gas Connections responded:

“The statement by John Reichert is no longer accurate. I submitted the project to engineering for approval. We will need a small system reinforcement, but we can supply the CHP project.”

When the Lead Account Manager – Customer Gas Connections made this statement, he was referring only to National Grid's ability to support the new CHP account on firm gas service with the existing boiler plant remaining on non-firm service. The engineering analysis only considered the CHP equipment gas demand.

The Senior Engineer – EE Technical Sales Support NE inferred from this response that firm gas service was available to both the existing boiler plant and the new CHP equipment. Therefore, the Navy was misinformed on the point that the existing plant would no longer need interruptible service.

A copy of these email communications has been provided as a part of Attachment DIV 9-6.

- (b) No further analyses were performed beyond those discussed in the Company's response to Data Request Division 9-6. The existing boiler plant gas loads were not analyzed for potential firm service – only the proposed CHP equipment.
- (c) No other employees at the Company (except for those included on the email) were aware that the employee who sent this email to the Navy was giving this answer.

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Division 9-10

Request:

Referring to the response to Division 6-4,

- (a) Please explain why the Company states that a gas service agreement would be either “with the Navy or the Navy’s contractor,”
- (b) Please provide a copy of any service agreements or contracts with the Navy that are already in place relating to gas service to the Navy, including without limitation the “Naval Station Newport Contract” referred to in one of the text boxes in the “Commercial Service/Main Agreement” between BQ Energy and the Company that was executed on May 4, 2018;
- (c) Please explain how an agreement with BQ Energy would align and operate in sync with the Navy’s current gas service arrangements for the central steam plant.

Response:

- (a) On May 4, 2018, the Narragansett Electric Company d/b/a National Grid (the Company) executed a Commercial Gas Service/Main Agreement with BQ Energy, LLC (BQ). At that time, the Navy had requested that the gas agreement be executed by BQ with BQ managing the CHP natural gas consumption and expenditures as a pass-through cost to the Navy. By the time the Company was drafting its response to Division 6-4 in early September 2018, the Navy had expressed to the Company that the Navy may be the customer of record for the CHP gas account, but a final decision had not been made. That is why the Company stated that a gas service agreement would be either “with the Navy or the Navy’s contractor.” On a conference call among the Company, the Navy, and BQ on October 1, 2018, the Navy decided that the Navy should be the customer of record for the CHP gas account. The Navy desired to have complete visibility and control of the CHP account because it will be the Navy’s responsibility to provide the output electricity and steam to its tenant base. Another reason for the decision was lack of a mechanism to reimburse BQ for monthly gas expenditures.
- (b) Please see Attachment DIV 9-10, which is a copy of any service agreements or contracts with the Navy that are already in place relating to gas service to the Navy, including without limitation the “Naval Station Newport Contract.” There are no other service agreements or contracts with the Navy already in place relating to gas service.

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- (c) Regardless of the specified Applicant, the Commercial Gas Service/Main Agreement, which covers firm gas distribution service to the proposed CHP equipment at the Navy property, would operate in addition to, and in parallel with, all other gas service arrangements with the Navy, including gas service arrangements for the central steam plant. Even though the CHP equipment operation generally will decrease gas and oil consumption at the central steam plant, the CHP agreement would not alter any contract terms of other gas service agreements or the Naval Station Newport Contract and modifications with the Navy.

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Attachment DIV 9-10

Please be advised that the electronic version of Attachment DIV 9-10 is too large to transmit electronically. The Company is providing Attachment DIV 9-10 on a USB Flash Drive.

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Division 9-13

Request:

Referring to the response to Division 6-4(f), the response indicates that the CHP project would be served on firm service tariff Rate 24. The "availability" requirements of Rate 24, however, state that it is available for customers "whose annual gas usage is equal to or greater than 150,000 Therms and whose off-peak (May-October) gas usage is equal to or greater than 31% of the annual gas usage for the most recent September through August period." Given the fact that the Navy CHP project will not be operating at all from mid-May to mid-October (as noted in the response to Division 2-10), why is the Company proposing that the Navy CHP project be served on the "C&I Large Load Factor Use Rate 24," rather than the "C&I Large Low Load Factor Use Rate 34?" How would it be consistent with the terms of Rate 24 given the operational forecast of the unit which seems clear would not meet the 31% threshold?

Response:

Referring to The Narragansett Electric Company d/b/a National Grid's (the Company) response to Division 6-4(f), the Company made an error in selecting the applicable firm service rate classification for the Navy CHP project. The Company agrees that the Navy CHP project should be provided firm gas service on the "C&I Extra Large Low Load Factor Use Rate 34" rate classification.

The following is an explanation of how this error was made. Please see Confidential Attachment DIV 9-13, which is the Company's Gas Bill and Margin Calculator Model. This model is used as the standard model to calculate the annual revenues that should be used in the RI-G CIAC Model. There is a drop-down menu, which requires the user to select the Customer Type (i.e., Residential Heating, Residential Non-Heating, Commercial/Industrial Heating, Commercial/Industrial Non-Heating, etc.). At the time of the Company's response to Division 6-4(f), the Company had selected the Customer Type "Commercial/Industrial Non-Heating" because CHP projects typically are considered process equipment, which provides power and thermal energy – not just "heating." This selection resulted in the incorrect auto-selection of Rate 24 as the applicable rate classification. The Gas Bill and Margin Calculator Model allows the user to override the rate class selection, which should have been done in this case because the load profile did not meet the requirements for Rate 24.

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Confidential Attachment DIV 9-13

Pursuant to PUC Rule 1.2(g), the Company is seeking confidential treatment of the Excel version of Confidential Attachment DIV 9-13 provided on USB Flash Drive.

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Division 9-14

Request:

Referring to the response to Division 6-3 regarding the CIAC calculation for BQ Energy, resulting in BQ Energy not having to pay any contribution,

- (a) Please rerun the calculation assuming the CHP project would be served on Rate 34 instead of Rate 24 and provide the results, including access to the actual calculations.
- (b) Please also rerun the calculation assuming the CHP project would be served on Non-Firm Transportation Service Rate 61 instead of Rate 24 and provide the results, including access to the actual calculations.

Response:

By way of background, in The Narragansett Electric Company d/b/a National Grid's (the Company) original Contribution in Aid of Construction (CIAC) analysis (Attachment DIV 6-3-2), the Company used only the estimated gas consumption of the CHP equipment to determine the relevant incremental distribution revenues. That original CIAC calculation had assumed that there would be no impact on incremental distribution revenues due to the reduction in non-firm gas volumes at the central steam plant. At that time (July 2017), the Company did not retain any non-firm revenues above the amount imputed into base distribution rates. All revenues associated with marginal non-firm gas volumes were flowed back to firm customers, and the Company was allowed to reconcile non-firm revenues to the amount imputed into base distribution rates through the On-System Margin credit factor. Further, at the time of the original CIAC analysis, the estimated gas consumption of the CHP equipment was 533,731 MMBtu.

On August 30, 2018, the Rhode Island Public Utilities Commission (the PUC) issued an Order No. 23265 in Docket No. 4708 eliminating the On-System Margin credit factor effective November 1, 2017. This order allows the Company to retain 100% of any marginal non-firm revenues. Because the Navy's existing central boiler plant receives non-firm service on Rate 61, and because operation of the proposed CHP equipment will reduce gas consumption at the central boiler plant, the CIAC calculation must account for the associated reduction in non-firm revenues now retained by the Company.

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The following attachments are provided as support for the revised CIAC calculations:

1. Confidential Attachment DIV 9-14-1: Fuel Consumption Summary, which summarizes the revised gas consumption of the proposed CHP equipment (i.e., 440,283 MMBtu) and the existing central boiler plant both "Pre-Project" and "Post-Project";
2. Confidential Attachment DIV 9-14-2: The Gas Bill & Margin Calculator Model, which calculates the Rate 34 gas distribution revenues associated with the CHP equipment gas consumption of 440,283 MMBtu. The calculations are shown on the "Calculations" tab in cells C19 through W61.
3. Confidential Attachment DIV 9-14-3: Incremental Gas Distribution Revenue Summary, which summarizes the incremental CHP project gas distribution revenues under two scenarios. The first scenario calculates the CHP equipment gas distribution revenues on Rate 34, the boiler plant gas distribution revenues on Rate 61 and the overall "Post-Project" incremental gas consumption and corresponding distribution revenues. The second scenario calculates the CHP equipment gas distribution revenues on Rate 61 assuming that the equipment will be interrupted more frequently resulting in a 20% lower consumption (i.e., 352,226 MMBtu), the boiler plant gas distribution revenues on Rate 61, and the overall "Post-Project" incremental gas consumption and corresponding distribution revenues.

The Gas Bill & Margin Calculator is not necessary for the Rate 61 calculations. The applicable tariff specifies a monthly charge of \$625 and a marginal gas distribution rate of \$0.0919 per therm.

With this context, the Company responds to part (a) and part (b) of this request as follows:

- (a) Please see Attachment DIV 9-14-4 for the CIAC calculation on the RI-G CIAC Model assuming the CHP is served on Rate 34. The CIAC result is \$0.
- (b) Please see Attachment DIV 9-14-5 for the CIAC calculation on the RI-G CIAC Model assuming the CHP is served on Rate 61. The CIAC result is \$0.

Navy CHP - Pre and Post Project Fuel Consumption Summary

Pre-Project	
Current Boiler Fuel Usage (MMBTU)	
Current Boiler Gas Usage (MMBTU)	
Current Boiler Gas Usage (Therms)	
Current Boiler Oil Usage (MMBTU)	
Current kWh	
Post-Project	
Proposed Turbine/Duct Burner Fuel Usage (MMBTU)	440,283
Proposed Turbine Nat Gas Usage (Therms)	4,402,826
Proposed Boiler Fuel Usage Post Turbine (MMBTU)	39,971
Proposed Boiler Gas Usage Post Turbine (MMBTU)	25,308
Proposed Boiler Gas Usage Post Turbine (Therms)	253,084
Proposed Boiler Fuel Oil Usage Post Turbine (MMBTU)	14,662
Proposed Total Fuel Usage (MMBTU) Post Project (Turbine, Duct Burner and Boilers)	480,254
Increase in Natural Gas Usage (Therms) Post Project	3,016,745
Fuel Oil Savings (MMBTU)	26,993

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Confidential Attachment DIV 9-14-1

Pursuant to PUC Rule 1.2(g), the Company is seeking confidential treatment of the Excel version of Confidential Attachment DIV 9-14-1 provided on USB Flash Drive.

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Confidential Attachment DIV 9-14-2

Pursuant to PUC Rule 1.2(g), the Company is seeking confidential treatment of the Excel version of Confidential Attachment DIV 9-14-2 provided on USB Flash Drive.

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Confidential Attachment DIV 9-14-3

Pursuant to PUC Rule 1.2(g), the Company is seeking confidential treatment of the Excel version of Confidential Attachment DIV 9-14-3 provided on USB Flash Drive.

4755-DIV-9-14(a): Navy CHP - Incremental Gas Distribution Revenue Summary

Pre-Project	
Current Boiler Gas Usage (Therms)	
Current Boiler Gas Distribution Revenues (Rate 61)	
Average Local Distribution Rate (\$/MMBtu)	
Post-Project	
Proposed Turbine Nat Gas Usage (Therms)	4,402,826
Proposed Turbine Gas Distribution Revenues (Rate 34)	\$674,865
Average Local Distribution Rate - Rate 34 (\$/MMBtu)	\$1.5328
Proposed Boiler Gas Usage Post Turbine (Therms)	253,084
Proposed Boiler Gas Distribution Revenues Post Turbine (Rate 61)	\$30,758
Increase in Natural Gas Usage (Therms) Post Project	3,016,745
Increase in Natural Gas Distribution Revenues Post Project	\$547,484
Average Local Distribution Rate (\$/MMBtu)	\$1.8148

4755-DIV-9-14(b): Navy CHP - Incremental Gas Distribution Revenue Summary

Pre-Project	
Current Boiler Gas Usage (Therms)	
Current Boiler Gas Distribution Revenues (Rate 61)	
Post-Project	
Proposed Turbine Nat Gas Usage (Therms) - estimated 20% reduction due to curtailment >=40 HDD	3,522,261
Proposed Turbine Gas Distribution Revenues (Rate 61)	\$331,196
Average Local Distribution Rate - Rate 61 (\$/MMBtu)	\$0.9403
Proposed Boiler Gas Usage Post Turbine (Therms)	253,084
Proposed Boiler Gas Distribution Revenues Post Turbine (Rate 61)	\$30,758
Increase in Natural Gas Usage (Therms) Post Project	2,136,180
Increase in Natural Gas Distribution Revenues Post Project	\$203,815
Average Local Distribution Rate (\$/MMBtu)	\$0.9541

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Attachment DIV 9-14-4

The Company is providing the Excel version of Attachment DIV 9-14-4 on
USB Flash Drive

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Attachment DIV 9-14-5

The Company is providing the Excel version of Attachment DIV 9-14-5 on
USB Flash Drive