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Associated Filing Identifier:

Service Agreement No. 2056

Cost Reimbursement Agreement

By and Between

New York State Electric & Gas Corporation

and

Niagara Mohawk Power Corporation d/b/a National Grid

Luther Forest Cost Reimbursement Agreement

COST REIMBURSEMENT AGREEMENT

This **COST REIMBURSEMENT AGREEMENT** (the “*Agreement*”), is made and entered into as of October 1, 2013 (the “*Effective Date*”), by and between **NEW YORK STATE ELECTRIC & GAS CORPORATION**, a utility organized and existing under the laws of New York State, having an office and place of business at 18 Link Dr., Binghamton New York 13902 (“*Customer*” or “*NYSEG*”) and **NIAGARA MOHAWK POWER CORPORATION d/b/a National Grid**, a corporation organized and existing under the laws of the State of New York, having an office and place of business at 300 Erie Boulevard West, Syracuse, New York 13202 (the “*Company*” or “*National Grid*”). Customer and Company may be referred to hereunder, individually, as a “*Party*” or, collectively, as the “*Parties*”.

WITNESSETH

WHEREAS, the Customer is proceeding with the connection of their new 115kV - 34.5kV station (the “*New Station*”), located adjacent to the existing National Grid/Luther Forest station, to the existing two (2) 115kV busses at such existing National Grid/Luther Forest station; and

WHEREAS, Customer has requested that Company perform certain Work as described herein; and

WHEREAS, Company is willing to perform the Work, subject to reimbursement by Customer of all Company costs and expenses incurred in connection therewith;

NOW, THEREFORE, in consideration of the premises and the mutual covenants set forth herein, the Parties agree as follows:

1.0 Certain Definitions

Wherever used in this Agreement with initial capitalization, whether in the singular or the plural, these terms shall have the following meanings:

“*Affiliate*” means any person or entity controlling, controlled by, or under common control with, any other person; “control” of a person or entity shall mean the ownership of, with right to vote, 50% or more of the outstanding voting securities, equity, membership interests, or equivalent, of such person or entity.

“*Agreement*” means this Cost Reimbursement Agreement, including all annexes, appendices, attachments, schedules, and exhibits and any subsequent written amendments or modifications thereto, as may be mutually agreed to and executed by the Parties.

“Applicable Requirements” shall mean all applicable federal, state and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or

administrative orders, permits and other duly authorized actions of any federal, state, local or other governmental regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction, NYISO, NPCC, and NYSRC requirements, and any applicable reliability standards.

“Balance Amount” shall have the meaning set forth in Section 8.1 of this Agreement.

“Breaching Party” shall have the meaning set forth in Section 21.1 of this Agreement.

“CEIP” shall have the meaning set forth in Section 25.4 of this Agreement.

“Company Reimbursable Costs” means the actual costs and expenses incurred by Company and/or its Affiliates in connection with performance of the Work or otherwise incurred by Company and/or its Affiliates in connection with the Project or this Agreement, and including, without limitation, any such costs that may have been incurred by Company and/or its Affiliates prior to the Effective Date. These Company Reimbursable Costs shall include, without limitation, the actual expenses for labor (including, without limitation, internal labor), services, materials, subcontracts, equipment or other expenses incurred in the execution of the Work or otherwise in connection with the Project, all applicable overhead, all federal, state and local taxes incurred (including, without limitation, all taxes arising from amounts paid to Company that are deemed to be contributions in aid of construction), all costs of outside experts, consultants, counsel and contractors, all other third-party fees and costs, and all costs of obtaining any required permits, rights, consents, releases, approvals, or authorizations, including, without limitation, the Required Approvals.

“Damages” shall have the meaning set forth in Section 12.1 of this Agreement.

“Day” means a calendar day, provided, that, if an obligation under this Agreement falls due on a Saturday, Sunday or legal holiday, the obligation shall be due the next business day worked.

“Disclosing Party” shall mean the Party disclosing Proprietary Information.

“Dollars” and “\$” mean United States of America dollars.

“Effective Date” shall have the meaning specified in the preamble of this Agreement.

“Environment” shall mean soil, surface waters, groundwaters, land, stream sediments, surface or subsurface strata, and ambient air.

“Environmental Law” shall mean any environmental or health-and-safety-related law, regulation, rule, ordinance, or by-law at the federal, state, or local level, whether existing as of

the Effective Date, previously enforced or subsequently enacted, or any judicial or administrative interpretation thereof.

“FERC” shall mean the Federal Energy Regulatory Commission.

“Force Majeure Event” shall have the meaning set forth in Section 23.1 of this Agreement.

“Good Utility Practice” means any of the practices, methods, and acts engaged in or approved by a significant portion of the electric utility industry during the relevant time period, or any of the practices, methods, and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety, and expedition. Good Utility Practice is not intended to be limited to the optimum practice, method, or act, to the exclusion of all others, but rather to refer to acceptable practices, methods, or acts generally accepted in the region in which the Project is located. Good Utility Practice shall include, but not be limited to, NERC, NPCC, NYSRC, and NYISO criteria, rules, guidelines, and standards, where applicable, and as they may be amended from time to time, including the rules, guidelines, and criteria of any successor organization to the foregoing entities.

“Hazardous Substances” means any pollutant, contaminant, toxic substance, hazardous material, hazardous waste, or hazardous substance, or any oil, petroleum, or petroleum product, as defined in or pursuant to the Federal Clean Water Act, as amended, the Comprehensive Environmental Response, Compensation and Liability Act, as amended, 42 U.S.C. Section 9601, et seq., the Resource Conservation and Recovery Act, as amended, 42 U.S.C. Section 6901, et seq., or any other Environmental Law.

“Indemnified Party” and “Indemnified Parties” shall have the meanings set forth in Section 12.1 of this Agreement.

“Indemnifying Party” shall have the meaning set forth in Section 12.1 of this Agreement.

“Initial Prepayment” shall have the meaning set forth in Section 7.1 of this Agreement.

“Monthly Report” shall have the meaning set forth in Section 7.3 of this Agreement.

“NPCC” shall mean the Northeast Power Coordinating Council, Inc. (a reliability council under Section 202 of the Federal Power Act) or any successor organization.

“NERC” shall mean the North American Electric Reliability Corporation or any successor organization.

“Non-Breaching Party” shall have the meaning set forth in Section 21.1 of this Agreement.

“Non-Disclosure Term” shall have the meaning set forth in Section 25.3.4 of this Agreement.

“NYISO” shall mean the New York Independent System Operator, Inc. or any successor organization.

“NYPSC” shall mean the New York Public Service Commission.

“NYSRC” shall mean the New York State Reliability Council or any successor organization.

“Party” and “Parties” shall have the meanings set forth in the preamble to this Agreement.

“Projected Milestone Schedule” shall have the meaning set forth in Section 5.3 of this Agreement.

“Project” means the Work to be performed under this Agreement by the Company.

“Project Manager” means the respective representative of the Customer and the Company appointed pursuant to Section 27.1 of this Agreement.

“Proprietary Information” means (i) all financial, technical and other non-public or proprietary information which is furnished or disclosed by the Disclosing Party or its Affiliates (or its or its Affiliates’ agents, servants, contractors, representatives, or employees) to the Receiving Party or its Representative(s) in connection with this Agreement and that is described or identified (at the time of disclosure) as being non-public, confidential or proprietary, or the non-public or proprietary nature of which is apparent from the context of the disclosure or the contents or nature of the information disclosed, (ii) any market sensitive information (including, without limitation, outages scheduled on generators or transmission lines of Company or any third party), (iii) all CEII and (iv) all memoranda, notes, reports, files, copies, extracts, inventions, discoveries, improvements or any other thing prepared or derived from any information described in subparts (i) through (iii) preceding.

“Receiving Party” shall mean the Party receiving Proprietary Information.

“Reimbursement Amount” shall have the meaning set forth in Section 8.1 of this Agreement.

“Release” shall mean any releasing, spilling, leaking, contaminating, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, disposing or dumping of any Hazardous Substances into the Environment.

“Representatives” shall, for the purposes of Article 25 of this Agreement, mean the Affiliates of a Party and such Party’s and its Affiliates’ officers, directors, employees, contractors, counsel and representatives.

“Requesting Party” shall have the meaning set forth in the Real Property Standards.

“Required Approvals” shall have the meaning set forth in Section 27.12 of this Agreement.

“Resources” shall have the meaning set forth in Section 23.1 of this Agreement.

“Threat of Release” shall mean a substantial likelihood of a Release that requires action to prevent or mitigate damage to the Environment that may result from such Release.

“Site” shall mean Luther Forest Station.

“Subcontractor” means any organization, firm or individual, regardless of tier, which Company retains in connection with the Agreement.

“Total Payments Made” shall have the meaning set forth in Section 8.1 of this Agreement.

“Work” shall have the meaning specified in Section 3.1 of this Agreement.

“Work Cost Estimate” shall have the meaning set forth in Section 6.1 of this Agreement.

2.0 Term

2.1 This Agreement shall become effective as of the Effective Date and shall remain in full force and effect until performance has been completed hereunder, or until terminated in accordance with the terms of this Agreement, whichever occurs first, provided, however, that this Agreement shall not expire or terminate until all amounts due and owing hereunder have been paid in full as contemplated by this Agreement.

3.0 Scope of Work

3.1 The scope of work is set forth in Exhibit A of this Agreement, attached hereto and incorporated herein by reference (the “Work”).

3.2 Company shall use commercially reasonable efforts to perform the Work in accordance with Good Utility Practice. Prior to the expiration of one (1) year following completion of the Work, Customer shall have the right to notify the Company of the need for correction of defective Work that does not meet the standards of this Section 3.2. If the Work is defective within the meaning of the prior sentence, the Company shall promptly complete, correct, repair or replace such defective Work, as appropriate. The remedy set forth in this Section is the sole and exclusive remedy granted to Customer for any failure of Company to meet the performance standards or requirements set forth in this Agreement.

4.0 Changes in the Work

4.1 Prior to commencement of the Work, each Party shall provide a written notice to the other Party containing the name and contact information of such Party’s

Project Manager.

- 4.2 If Customer wishes to request a change in the Work, such request shall be submitted to the Company in writing. If, as a result of any such request, the Parties agree to a change in the Work, the agreed change will be set forth in a written document signed by both Parties specifying such change. The Projected Milestone Schedule and the Work Cost Estimate shall be adjusted and/or extended as mutually agreed by the Parties to reflect any such agreed change to the Work. Any additional costs arising from such change shall be paid by the Customer as part of Company Reimbursable Costs when invoiced by the Company in accordance with Section 7.2 of this Agreement.
- 4.3 Notwithstanding the above, Company may make any reasonable changes in the Work to ensure the completion of the Project or prevent delays in the schedule. Company shall provide Customer with written notice of any such changes to the Work within fifteen (15) business days after such changes are implemented. The Projected Milestone Schedule and the Work Cost Estimate shall be adjusted accordingly and any additional costs shall be paid by the Customer as part of Company Reimbursable Costs when invoiced by the Company in accordance with Section 7.2 of this Agreement.

The foregoing notwithstanding, the Company is not required to obtain the consent of the Customer for any change to the Work if such change is made in order to comply with any Applicable Requirement(s) or Good Utility Practice or to enable Company's utility facilities to continue, commence or recommence commercial operations in accordance with all applicable legal and regulatory requirements and all applicable industry codes and standards. The Projected Milestone Schedule and the Work Cost Estimate shall be adjusted accordingly and any additional costs shall be paid by the Customer as part of Company Reimbursable Costs when invoiced by the Company in accordance with Section 7.2 of this Agreement.

5.0 **Performance and Schedule; Conditions to Proceed**

- 5.1 The Company shall use commercially reasonable efforts to have any Work performed by its direct employees performed during normal working hours. The foregoing notwithstanding, if Work is performed outside of normal working hours, Customer shall be responsible for paying all actual costs incurred in connection therewith, including, without limitation, applicable overtime costs, as part of Company Reimbursable Costs.
- 5.2 If Customer requests, and the Company agrees, to work outside normal working hours due to delays in the Project schedule or for other reasons, Company shall be entitled to recover all resulting costs as part of Company Reimbursable Costs.
- 5.3 The Projected Milestone Schedule is set forth in Exhibit B, attached hereto and incorporated herein by reference. The Projected Milestone Schedule is n projection only and is subject to change. Neither Party shall be liable for failure to

meet the Preliminary Milestone Schedule, any milestone, or any other projected or preliminary schedule in connection with this Agreement or the Project.

5.4 Anything in this Agreement to the contrary notwithstanding, Company shall not be obligated to proceed with any Work until all of the following conditions have been satisfied:

- (i) all Required Approvals for the Work have been received, are in form and substance satisfactory to the Parties, have become final and non-appealable and commencement of the Work is permitted under the terms and conditions of such Required Approvals, and
- (ii) all Company Reimbursable Costs invoiced to date have been paid in full to Company.

6.0 **Estimate Only; Customer Obligation to Pay Company Reimbursable Costs.**

6.1 The current good faith estimate of the Company Reimbursable Costs, exclusive of any applicable taxes, is One Million Thirty One Hundred Thousand Dollars (\$1,031,000. (the "*Work Cost Estimate*"). The Work Cost Estimate is an estimate only and shall not limit Customer's obligation to pay Company for all Company Reimbursable Costs actually incurred by Company or its Affiliates.

7.0 **Payment**

7.1 Customer shall pay or reimburse Company for all Company Reimbursable Costs. The Company shall invoice Customer for an initial prepayment of Five Hundred Thousand dollars (\$500,000.00) ("*Initial Prepayment*") and Customer shall pay the Initial Prepayment to Company within thirty (30) Days of the invoice due date. Company shall not be obligated to commence Work under this Agreement prior to receiving the Initial Prepayment.

7.2 Company may periodically invoice Customer for Company Reimbursable Costs incurred. Each invoice will contain reasonable detail sufficient to show the invoiced Company Reimbursable Costs incurred by line item. Company is not required to issue periodic invoices to Customer and may elect, in its sole discretion, to continue performance hereunder after the depletion of the Initial Prepayment or any subsequent prepayment, as applicable, and invoice Customer at a later date. Except as otherwise expressly provided for in this Agreement, all invoices shall be due and payable thirty (30) Days from date of invoice. If any payment due under this Agreement is not received within thirty (30) Days after the applicable invoice due date, the Customer shall pay to the Company interest on the unpaid amount at an annual rate equal to two percent (2%) above the prime rate of interest from time to time published under "Money Rates" in The Wall Street Journal (or if at the time of determination thereof, such rate is not being published in The Wall Street Journal, such comparable rate from a federally

insured bank in New York, New York as the Company may reasonably determine), the rate to be calculated daily from and including the due date until

payment is made in full. In addition to any other rights and remedies available to Company, if any payment due from Customer under this Agreement is not received within thirty (30) Days after the applicable invoice due date, Company may suspend any or all Work pending receipt of all amounts due from Customer; any such suspension shall be without recourse or liability to Company.

- 7.3 Each month during the term of this Agreement, the Company shall provide Customer with a report (each, a "Monthly Report") containing (i) unless invoiced, the Company's current estimate of the Company Reimbursable Costs incurred in the prior calendar month, and (ii) the Company's current forecast (20% to 40% variance) of the Company Reimbursable Costs expected to be incurred in the next calendar month, provided, however, that such Monthly Reports (and any forecasted or estimated amounts reflected therein) shall not limit Customer's obligation to pay Company for all Company Reimbursable Costs actually incurred by Company or its Affiliates.
- 7.4 If Customer claims exemption from sales tax, Customer agrees to provide Company with an appropriate, current and valid tax exemption certificate, in form and substance satisfactory to National Grid, relieving National Grid from any obligation to collect sales taxes from Customer ("Sales Tax Exemption Certificate"). During the term of this Agreement, Customer shall promptly provide National Grid with any modifications, revisions or updates to the Sales Tax Exemption Certificate or to Customer's exemption status. If Customer fails to provide an acceptable Sales Tax Exemption Certificate for a particular transaction, National Grid shall add the sales tax to the applicable invoice to be paid by Customer.
- 7.5 Company shall maintain reasonably detailed records to document the Company Reimbursable Costs. So long as a request for access is made within six (6) months of completion of the Work, Customer and its chosen auditor shall, during normal business hours and upon reasonable advanced written notice of not less than ten (10) days, be provided with access to such records for the sole purpose of verification by Customer that the Company Reimbursable Costs have been incurred by Company.
- 7.6 Company's invoices to Customer for all sums owed under this Agreement shall be sent to the individual and address specified below, or to such other individual and address as Customer may designate, from time to time, by written notice to the Company :

Name: Mr. Todd Foster
NYSEG

Address: 18 Link Dr.

PO Box 5224

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Binghamton NY 13902-5224

- 7.7 All payments made under this Agreement shall be made in immediately available funds. Payments to the Company shall be made by wire transfer to:

Wire Payment: JP Morgan Chase
ABA# 021000021
Credit: National Grid USA
Account#.77149642

8.0 **Final Payment**

- 8.1 Following completion of the Work, the Company shall perform an overall reconciliation of the total of all Company Reimbursable Costs to the invoiced costs previously paid to Company by Customer under this Agreement (“*Total Payments Made*”). If the total of all Company Reimbursable Costs is greater than the Total Payments Made, the Company shall provide a final invoice to Customer for the balance due to the Company under this Agreement (the “*Balance Amount*”). If the Total Payments Made is greater than the total of all Company Reimbursable Costs, Company shall reimburse the difference to Customer (“*Reimbursement Amount*”). The Reimbursement Amount or Balance Amount, as applicable, shall be due and payable upon final reconciliation but no later than sixty (60) Days after such reconciliation. Any portion of the Balance Amount or Reimbursement Amount, as applicable, remaining unpaid after that time shall be subject to interest as calculated pursuant to Section 7.2 of this Agreement.

9.0 **Customer’s Responsibilities**

- 9.1 If and to the extent applicable or under the control of the Customer, Customer shall provide complete and accurate information regarding requirements for the Project and the Site(s), including, without limitation, constraints, space requirements, underground or hidden facilities and structures, and all applicable drawings and specifications.
- 9.2 Customer shall prepare, file for, and use commercially reasonable efforts to obtain all Required Approvals necessary to perform its obligations under this Agreement.
- 9.3 Customer shall reasonably cooperate with Company as required to facilitate Company’s performance of the Work.

10.0 **Meetings**

- 10.1 Each Party’s Project Manager shall attend Project meetings at times and places mutually agreed to by the Parties, which meetings shall be held at least monthly

by teleconference or in person as agreed to by the Project Managers.

11.0 **Disclaimers**

- 11.1 THE COMPANY IS NOT IN THE BUSINESS OF PERFORMING DESIGN, ENGINEERING OR CONSTRUCTION SERVICES FOR PROFIT AND IS NOT RECEIVING ANY FEE OR PROFIT (AS CONTRASTED WITH COST REIMBURSEMENT) FOR ITS PERFORMANCE OF THE WORK HEREUNDER. THE EXCLUSIVE REMEDY GRANTED TO CUSTOMER FOR ANY ALLEGED FAILURE OF COMPANY TO MEET THE PERFORMANCE STANDARDS OR REQUIREMENTS CONTAINED IN THIS AGREEMENT IS AS SET FORTH IN SECTION 3.2. COMPANY MAKES NO WARRANTIES, REPRESENTATIONS, OR GUARANTEES IN CONNECTION WITH THIS AGREEMENT, ANY PROJECT, OR ANY WORK OR SERVICES PERFORMED IN CONNECTION THEREWITH, WHETHER WRITTEN OR ORAL, STATUTORY, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ALL OF WHICH ARE HEREBY EXPRESSLY EXCLUDED AND DISCLAIMED. CUSTOMER ACKNOWLEDGES AND AGREES THAT ANY WARRANTIES PROVIDED BY ORIGINAL MANUFACTURERS, LICENSORS, OR PROVIDERS OF MATERIAL, EQUIPMENT, SERVICES OR OTHER ITEMS PROVIDED OR USED IN CONNECTION WITH THE WORK, INCLUDING ITEMS INCORPORATED IN THE WORK (“THIRD PARTY WARRANTIES”), ARE NOT TO BE CONSIDERED WARRANTIES OF THE COMPANY AND THE COMPANY MAKES NO REPRESENTATIONS, GUARANTEES, OR WARRANTIES AS TO THE APPLICABILITY OR ENFORCEABILITY OF ANY SUCH THIRD PARTY WARRANTIES.
- 11.2 Notwithstanding any other provision of this Agreement, this Article shall survive the termination, cancellation or expiration of this Agreement.

12.0 **Liability and Indemnification**

- 12.1 To the fullest extent permitted by applicable law (including, without limitation, the applicable provisions of any governing federal or state tariff), Customer shall indemnify and hold harmless, and at Company's option, defend Company, its parents and Affiliates and their respective contractors, officers, directors, servants, agents, representatives, and employees (each, individually, an "Indemnified Party" and, collectively, the "Indemnified Parties"), from and against any and all liabilities, damages, losses, costs, expenses (including, without limitation, any and all reasonable attorneys' fees and disbursements), causes of action, suits, liens, claims, damages, penalties, obligations, demands or judgments of any nature, including, without limitation, for death, personal injury and property damage, economic damage, and claims brought by third parties for personal injury and/or property damage (collectively, "Damages"), incurred by any Indemnified Party to the extent caused by (i) any breach of this Agreement by Customer, its Affiliates, third-party contractors, or their respective officers, directors, servants, agents, representatives, or employees, or (ii) the negligence, unlawful act or omission, or intentional misconduct of Customer, its Affiliates, third-party contractors, or their respective officers, directors, servants, agents, representatives, and employees, arising out of or in connection with this Agreement, the Project, or any Work, except to the extent such Damages are directly caused by the gross negligence, intentional misconduct or unlawful act of the Indemnified Party or its contractors, officers, directors, servants, agents, representatives, or employees.
- 12.2 Customer shall defend, indemnify and save harmless Company, its parents and Affiliates and their respective contractors, officers, directors, servants, agents, representatives, and employees, from and against any and all liabilities, losses, costs, counsel fees, expenses, damages, judgments, decrees and appeals resulting from any charge or encumbrance in the nature of a laborer's, mechanic's or materialman's lien asserted by any of Customer's subcontractors or suppliers in connection with the Work or the Project.
- 12.3 Customer shall also protect, indemnify and hold harmless the Company and its Affiliates from and against the cost consequences of any tax liability imposed against or on Company and/or its Affiliates as the result of payments, and/or real or personal property transfers, made in connection with this Agreement, as well as any related interest and penalties, other than interest and penalties attributable to any delay directly caused by Company or the applicable Company Affiliate.
- 12.4 The Company's total cumulative liability to Customer for all claims of any kind, whether based upon contract, tort (including negligence and strict liability), or otherwise, for any loss, injury, or damage connected with, or resulting from, this Agreement, the Project or the Work, shall not exceed the aggregate amount of all payments made to Company by Customer as Company Reimbursable Costs under this Agreement.

- 12.5 Neither Party shall be liable to the other Party for consequential, indirect, special, incidental, multiple, or punitive damages (including, without limitation, attorneys' fees or litigation costs) in connection with or related to this Agreement, including, without limitation, damage claims based on causes of action for breach of contract, tort (including negligence), or any other theory of recovery, whether or not (i) such damages were reasonably foreseeable or (ii) the Parties were advised or aware that such damages might be incurred.
- 12.6 Neither Party shall be liable to the other Party for claims or damages for lost profits, delays, loss of use, business interruption, or claims of customers, whether such claims are categorized as direct or consequential damages, or whatever the theory of recovery, and whether or not (i) such damages were reasonably foreseeable or (ii) the Parties were advised or aware that such damages might be incurred.
- 12.7 Anything in this Agreement to the contrary notwithstanding, neither Party shall be responsible for any failure or inability to perform hereunder to the extent such failure or inability is caused by the acts or omissions of the other Party (including any contractor of such Party or any person or entity for whom such Party is legally responsible) or of any third party (other than a subcontractor of the Party that is unable or failing to perform hereunder).

For the avoidance of doubt: neither Party, as applicable, shall have any responsibility or liability under this Agreement for any delay in performance or nonperformance to the extent such delay in performance or nonperformance is caused by or as a result of (a) the inability or failure of the other Party or its contractors to cooperate or to perform any tasks or responsibilities contemplated to be performed or undertaken by such other Party under this Agreement, (b) any unforeseen conditions or occurrences beyond the reasonable control of the Party (including, without limitation, conditions of or at the Site, delays in shipments of materials and equipment and the unavailability of materials), (c) the inability or failure of Customer and Company to reach agreement on any matter requiring their mutual agreement under the terms of this Agreement, or (d) any valid order or ruling by any governmental agency or authority having jurisdiction over the subject matter of this Agreement.

- 12.8 Anything in this Agreement to the contrary notwithstanding, if any Party's liability in connection with this Agreement is limited or capped pursuant to any applicable law, statute, rule or regulation, then the other Party hereto shall be entitled to elect an identical liability limitation and/or cap as if such law, statute, rule or regulation were applicable to such Party.
- 12.9 Notwithstanding any other provision of this Agreement, this Article shall survive the termination, cancellation or expiration of this Agreement.

13.0 **Employee Claims; Insurance**

- 13.1 The Company elects to self-insure to maintain the insurance coverage amounts set forth in Exhibit C of this Agreement.
- 13.2 Prior to commencing Work on the Project and during the term of the Agreement, the Customer, at its own cost and expense, shall procure and maintain insurance in form and amounts set forth in Exhibit C of this Agreement, or Customer may self-insure to the extent authorized or licensed to do so under the applicable laws of the State of New York. Customer hereby elects to self-insure to maintain the insurance coverage amounts set forth in Exhibit C of this Agreement.
- 13.3 Except to the extent Customer self-insures in accordance with Section 13.2 hereof, the Customer shall have its insurer furnish to the Company certificates of insurance, on forms approved by the Insurance Commissioner of the State of New York, evidencing the insurance coverage required by this Article, such certificates to be provided prior to commencement of Work.
- 13.4 Each Party shall be separately responsible for insuring its own property and operations.

14.0 **Assignment and Subcontracting**

- 14.1 Either Party may assign this Agreement, or any part thereof, to any of its Affiliates provided such assignee Affiliate agrees in writing to be bound by the terms and conditions of this Agreement. Any assignment of this Agreement in violation of the foregoing shall be voidable at the option of the non-assigning Party. Each Party has the right to subcontract some or all of the work to be performed by such Party under the terms of this Agreement. Each Party may also use the services of its Affiliates in connection with its performance under this Agreement. Customer agrees that the costs and expenses of such Affiliates or contractors charged to or incurred by Company shall be paid by Customer as part of the Company Reimbursable Costs.

15.0 **Independent Contractor; No Partnership; No Agency; No Utility Services**

- 15.1 Company and Customer shall be independent contractors. This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon any Party. No Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or be an agent or representative of, or to otherwise bind, the other Party. This Agreement is not an agreement to provide or take utility services of any kind, including, without limitation, interconnection or other electric transmission services.

16.0 **Examination, Inspection and Witnessing**

16.1 Subject to Customer's and its representatives' compliance with Company's security, safety, escort and other access requirements, the Customer and/or its representatives shall have the right to inspect and examine the Work, or witness any test with respect to the Work, from time to time, when and as mutually agreed by the Parties, at Customer's sole cost and expense, and with reasonable prior notice to Company. Unless otherwise agreed between the Parties, such inspections, examinations and tests shall be scheduled during normal business hours.

17.0 **Safety**

17.1 Each Party shall be solely responsible for the safety and supervision of its own employees, representatives and contractors involved with the Work or any other activities contemplated by this Agreement. In connection with the activities contemplated by this Agreement, each Party shall, and shall require its representatives, contractors, and employees to, comply with all applicable Federal, state and local health and safety requirements, rules, regulations, laws and ordinances, including without limitation, the safety regulations adopted under the Occupational Safety and Health Act of 1970 ("*OSHA*"), as amended from time to time. While on the property (including, without limitation, easements or rights of way) of, or accessing the facilities of, the other Party, each Party's employees and/or contractors and agents shall at all times abide by the other Party's safety standards and policies, switching and tagging rules, and escort and other applicable access requirements. The Party owning or controlling the property or facilities shall have the authority to suspend the other Party's access, work or operations in and around such property or facilities if, in its sole judgment, at any time hazardous conditions arise or any unsafe practices are being followed by the other Party's employees, agents, representatives or contractors.

18.0 **Approvals, Permits and Easements**

18.1 The actual cost of obtaining all Required Approvals obtained by or on behalf of the Company shall be paid for by Customer as part of Company Reimbursable Costs.

19.0 **Environmental Protection; Hazardous Substances or Conditions**

19.1 The Company shall in no event be liable to Customer, its Affiliates or contractors, their respective officers, directors, employees, agents, servants, or representatives, or any third party with respect to, or in connection with, the presence of any Hazardous Substances which may be present at or on any Customer or third party owned, occupied, used, or operated property or facility (including, without

limitation, easements, rights-of-way, or other third-party property) or which the Company, its Affiliates or contractors, their respective officers, directors,

employees, agents, servants, or representatives may discover, release, or generate at or on such properties or facilities through no negligent or unlawful act of the Company, and Company hereby disclaims any and all such liability to the fullest extent allowed by applicable law. Customer agrees to hold harmless, defend, and indemnify the Company, its Affiliates and contractors, and their respective directors, officers, agents, servants, employees and representatives from and against any and all claims and/or liability in connection with, relating to, or arising out of (i) the presence, discovery, release, threat of release or generation of Hazardous Substances, or (ii) the breach of any Federal, state, or local laws, rules, regulations, codes, or ordinances relating to the environment, including, without limitation, the Comprehensive Environmental Response, Compensation and Liability Act, as amended, 42 U.S.C. §§ 9601 et seq., the Resource Conservation and Recovery Act, as amended, 42 U.S.C. §§ 6901 et seq., except to the extent such presence, discovery, release, threat of release, generation or breach is or are directly and solely caused by the negligent or unlawful act of the Company or of any person or entity for whom the Company is legally responsible. The obligations under this Section shall not be limited in any way by any limitation on Customer's insurance or by any limitation of liability or disclaimer provisions contained in this Agreement. The provisions of this Section shall survive the expiration, cancellation or earlier termination of this Agreement.

- 19.2 Customer shall promptly inform the Company, in writing, of any Hazardous Substances, or unsafe, dangerous, or potentially dangerous, conditions or structures, whether above-ground or underground, that are present on, under, over, or in Customer- owned, occupied, used, managed or operated facilities or property (including, without limitation, easements, rights-of-way, or other third-party property) to be used or accessed in connection with the Work or this Agreement. Prior to Company's commencement of the Work, Customer shall be obligated to use its best efforts (including, without limitation, the use of DIGSAFE or other similar services) to adequately investigate the presence and nature of any such Hazardous Substances, or unsafe, dangerous, or potentially dangerous, conditions or structures, and to promptly, fully, and in writing, communicate the results thereof to the Company. Customer's provision to the Company of the information contemplated in this Section shall in no event give rise to any liability or obligation on the part of the Company, nor shall Customer's obligations under this Agreement, or under law, be decreased or diminished thereby.

20.0 **Suspension of Work**

- 20.1 Subject to Section 20.2, below, Customer may interrupt, suspend, or delay the Work by providing written notice to the Company specifying the nature and expected duration of the interruption, suspension, or delay. Company will use commercially reasonable efforts to suspend performance of the Company Work as requested by Customer. Customer shall be responsible to pay Company (as part of Company Reimbursable Costs) for all costs incurred by Company that arise as a result of such interruption, suspension or delay.
- 20.2 As a precondition to the Company resuming the Work following a suspension under Section 20.1, the Projected Milestone Schedule and the Work Cost Estimate shall be revised as mutually agreed by the Parties to reflect the interruption, suspension, or delay. Adjustments to the Company Reimbursable Costs shall include any costs or expenses the Company incurs as a result of the interruption, suspension, or delay.

21.0 **Right to Terminate Agreement**

- 21.1 If either Party (the "Breaching Party") (a) fails to pay any amount when due under the terms of this Agreement or fails to comply with or perform, in any material respect, any of the other terms or conditions of this Agreement; (b) sells or transfers all or substantially all of its assets; (c) enters into any voluntary or involuntary bankruptcy proceeding or receivership; or (d) makes a general assignment for the benefit of its creditors, then the other Party (the "Non-Breaching Party") shall have the right, without prejudice to any other right or remedy and after giving five (5) Days' written prior notice to the Breaching Party and a reasonable opportunity for cure (not to exceed thirty (30) Days in the case of a failure to pay amounts when due), to terminate this Agreement, in whole or in part, and thereupon each Party shall discontinue its performance hereunder to the extent feasible and make every reasonable effort to procure cancellation of existing Work- and/or Project- related commitments, orders and contracts upon terms that are reasonably expected to minimize all associated costs. However, nothing herein will restrict Company's ability to complete aspects of the Work that Company must reasonably complete in order to return its facilities and the Sites to a configuration in compliance with Good Utility Practice and all Applicable Requirements. The Non-Breaching Party shall also have the right to pursue any and all rights it may have against the Breaching Party under applicable law, subject to other applicable terms and conditions of this Agreement (including, without limitation, any applicable limitations on liability contained herein).
- 21.2 In the event of any early termination or cancellation of the Work as contemplated in this Agreement, Customer shall pay Company for:

- (i) all Company Reimbursable Costs for Work performed on or before the effective date of termination or cancellation;
- (ii) all other Company Reimbursable Costs incurred by Company in connection with the Work prior to the effective date of termination or cancellation, including, without limitation, for materials, equipment, tools, construction equipment and machinery, engineering and other items, materials, assets or services which cannot reasonably be avoided, mitigated or cancelled;
- (iii) all Company Reimbursable Costs incurred to unwind Work that was performed prior to the effective date of termination or cancellation to the extent reasonably necessary to return Company's facilities to a configuration in compliance with Good Utility Practice and all Applicable Requirements;
- (iv) all Company Reimbursable Costs arising from cancellation costs relating to orders or contracts entered into in connection with the Work prior to the effective date of termination or cancellation; and
- (v) all Company Reimbursable Costs arising from demobilization expenses incurred by Company which cannot be reasonably avoided or mitigated.

22.0 **[Reserved]**

23.0 **Force Majeure**

23.1 A "*Force Majeure Event*" shall include fire, flood, windstorm, adverse weather conditions, emergencies, explosion, terrorism, riot, war, sabotage, acts of God, strikes or labor slow-downs, court injunction or order, federal and/or state law or regulation, delays by governmental authorities in approving regulatory, license and permit requests necessary in connection with the Work or Project, or order by any federal or state regulatory agency, or other causes, conditions or circumstances beyond the affected Party's reasonable control. Without limiting the foregoing, a "Force Majeure Event" shall also include unavailability of personnel, equipment, supplies, or other resources ("*Resources*") due to diversion of such Resources for other utility-related duties in connection with an emergency or other similar contingency, including, without limitation, storms or other adverse weather conditions.

If a Force Majeure Event should occur and impair the ability of either or both Parties to perform its, or their respective, obligations hereunder, then, to the extent affected by such Force Majeure Event, the performance of this Agreement, with the exception of payment obligations, shall be suspended for the duration of such Force Majeure Event. At the conclusion of a Force Majeure Event, the price and time for performance under this Agreement shall be adjusted as reasonably

necessary to overcome the effect of the delay occasioned by such Force Majeure Event. The foregoing notwithstanding and with the exception of payment

obligations, if, as the direct or indirect result of any Force Majeure Event, the Parties' continued performance hereunder becomes irreparably impaired or prevented, the Parties may mutually agree to terminate this Agreement, in whole or in part, with no further obligation or liability; provided, however, that, notwithstanding any such termination, Customer shall pay the Company all of the Company's Company Reimbursable Costs in accordance with Section 21.2 of this Agreement.

23.2 Within thirty (30) Days after the termination of any delay occasioned by a Force Majeure Event, the affected Party shall give written notice to the other Party specifying the estimated impact of the delay.

23.3 For the avoidance of doubt: to the extent any Party has a payment obligation pursuant to the terms of this Agreement, such payment obligation shall not be subject to or conditioned upon such Party receiving funding or reimbursement from any third party (and any failure to secure such funding or reimbursement shall not constitute a Force Majeure Event), nor shall any such obligation be conditioned upon the other Party executing any certificates or other instruments not expressly and specifically required by the terms of this Agreement.

24.0 **[Reserved]**

25.0 **Proprietary and Confidential Information**

25.1 Each Party acknowledges that, in the course of the performance of this Agreement, it may have access to Proprietary Information of the other Party.

25.2 General Restrictions. Upon receiving Proprietary Information, the Receiving Party) and its Representative shall keep in strict confidence and not disclose to any person (with the exception of the Representatives of the Receiving Party, to the extent each such Representative has a need to know in connection herewith) any of the Disclosing Party's Proprietary Information except as otherwise provided by the terms and conditions of this Agreement. The Receiving Party and its Representatives shall not use such Proprietary Information except for the purposes identified herein without the prior written approval of the Disclosing Party. The Receiving Party shall be solely liable for any breach of this Section to the extent caused by its Representatives. Customer agrees that any Proprietary Information will be used solely for the Project and will not be used, either directly or indirectly, for the Customer's financial gain and/or commercial advantage or in violation of any applicable laws, rules or regulations.

25.3 Exceptions. Subject to Section 25.4 hereof, the Receiving Party shall not be precluded from, nor liable for, disclosure or use of Proprietary Information that:

25.3.1 is in or enters the public domain, other than by a breach of this Section; or

- 25.3.2 is known to the Receiving Party or its Representatives at the time of first disclosure hereunder, or thereafter becomes known to the Receiving Party or its Representatives subsequent to such disclosure without similar restrictions from a source other than the Disclosing Party, as evidenced by written records; or
- 25.3.3 is developed by the Receiving Party or its Representatives independently of any disclosure under this Agreement, as evidenced by written records; or
- 25.3.4 is disclosed more than three (3) years after first receipt of the disclosed Proprietary Information, or three (3) years after the termination or expiration of this Agreement, whichever occurs later (the "Non-Disclosure Term"); or
- 25.3.5 is disclosed following receipt of the Disclosing Party's written consent to the disclosure of such Proprietary Information; or
- 25.3.6 is necessary to be disclosed, in the reasonable belief of the Receiving Party or its Representatives, for public safety reasons, provided, that, Receiving Party has attempted to provide as much advance notice of the disclosure to the Disclosing Party as is practicable under the circumstances.

Anything in this Article or the Agreement to the contrary notwithstanding, the Receiving Party or its Representative(s) may disclose Proprietary Information of the other Party to the extent the Receiving Party or its Representative(s) is required to do so by law, by a court, or by other governmental or regulatory authorities; provided, however, that, if permitted to do so by applicable law, the Receiving Party shall give the Disclosing Party written notice of any such required disclosure prior to such disclosure being made so that the Disclosing Party may seek a protective order with respect to such Proprietary Information. Receiving Party will reasonably cooperate with the Disclosing Party's efforts to obtain such protective order.

- 25.4 Each Party acknowledges that information and/or data disclosed under this Agreement may include "critical energy infrastructure information" under applicable FERC rules and policies ("CEII"). Receiving Party shall, and shall cause its Representatives to, strictly comply with any and all laws, rules and regulations (including, without limitation, FERC regulations, rules, orders and policies) applicable to any such CEII disclosed by or on behalf of Disclosing Party or that relates to any of Disclosing Party's or Disclosing Party's Affiliates' facilities.

Neither the Receiving Party nor its Representatives shall divulge any such CEII to any person or entity, directly or indirectly, unless permitted to do so by law and unless the Receiving Party has first obtained, in each case, the express specific written consent of the Disclosing Party and any affected Affiliate of the Disclosing Party. In any event, to the extent that the Receiving Party or any of its Representatives seeks or is ordered to submit any such CEII to FERC, a state regulatory agency, court or other governmental body, the Receiving Party shall, in addition to obtaining the Disclosing Party's and its Affiliate's prior written consent (as applicable), seek a protective order or other procedural protections to ensure that such information is accorded CEII status and is otherwise treated as confidential.

In the case of any Proprietary Information that is CEII, Receiving Party's obligations and duties under this Article shall survive until (i) the expiration of the Non-Disclosure Term, or (ii) the date on which such CEII is no longer required to be kept confidential under applicable law, whichever is later. With respect to CEII, in the event of any conflict or inconsistency between this Section and any other term or provision of this Agreement, this Section shall govern in connection with such CEII.

- 25.5 Notwithstanding any provision of this Agreement to the contrary, all assets, equipment and facilities procured or constructed by or on behalf of Company, and all plans, designs, specifications, drawings and other materials and documents created or prepared by or for Company, in connection with the Work, and all title, copyright, intellectual property and other rights therein, shall be and remain the sole property of Company.
- 25.6 This Article shall survive any termination, expiration or cancellation of this Agreement.

26.0 **Governing Law; Effect of Applicable Requirements**

- 26.1 This Agreement is made and shall be interpreted, construed, governed, and enforced in accordance with the laws of the State of New York, without reference to such State's conflict-of-laws doctrine. The Company and Customer agree to submit to the personal jurisdiction of the courts in the State of New York, or the Federal District courts in the State of New York, as permitted by law, with respect to any matter or dispute arising out of this Agreement.
- 26.2 If and to the extent a Party is required or prevented or limited in taking any action or performance with respect to this Agreement by any Applicable Requirement(s), such Party shall not be deemed to be in breach of this Agreement as a result of such compliance with the Applicable Requirement(s).

27.0 **Miscellaneous**

- 27.1 **Project Managers.** Promptly following the Effective Date, each Party shall designate a Project Manager and shall provide the other Party with a written notice containing the name and contact information of such Project Manager. Whenever either Party is entitled to approve a matter, the Project Manager for the Party responsible for the matter shall notify the Project Manager of the other Party of the nature of such matter. The Project Managers shall discuss such matter, and each Project Manager shall confer on such matter on behalf of his/her Party. The foregoing notwithstanding, in no event shall any Project Manager be authorized to amend or modify the provisions of this Agreement. Each Party may change its Project Manager, from time to time, by written notice to the other Party.
- 27.2 **Dispute Resolution.** Any dispute arising under this Agreement shall be the subject of good-faith negotiations between the Parties. Each Party shall designate one or more representatives with the authority to negotiate the matter in dispute for the purpose of participating in such negotiations. Unless a Party identifies exigent circumstances reasonably requiring expedited resolution of the dispute by a court or agency with jurisdiction over the dispute, any dispute that is not resolved through good-faith negotiations after a negotiation period of not less than thirty (30) days may be submitted by either Party for resolution to a court or to an agency with jurisdiction over the dispute. Notwithstanding the foregoing, any dispute arising under this Agreement may be submitted to non-binding arbitration or any other form of alternative dispute resolution upon the agreement of both Parties to participate in such an alternative dispute resolution process.
- 27.3 **Compliance with Law.** Each Party shall comply, at all times, with all Applicable Requirements in connection with this Agreement and performance hereunder. Such compliance shall include, among other things, compliance with all applicable wage and hour laws and regulations and all other laws and regulations dealing with or relating to the employment of persons, and the payment of contributions, premiums, and taxes required by such laws and regulations. For the avoidance of doubt: neither Party shall be required to undertake or complete any action or performance under this Agreement that is inconsistent with such Party's standard safety practices, its material and equipment specifications, its design criteria and construction procedures, its labor agreements, Good Utility Practice and/or any Applicable Requirement(s).

- 27.4 **Form and Address.** All notices, invoices and other communications from either Party to the other hereunder shall be in writing and shall be deemed received (i) upon actual receipt when personally delivered, (ii) upon acknowledgment of receipt if sent by facsimile, (iii) upon the expiration of the third (3rd) business Day after being deposited in the United States mails, postage prepaid, certified or registered mail, or (iv) upon the expiration of one (1) business Day after being deposited during the regular business hours for next-day delivery and prepaid for overnight delivery with a national overnight courier, addressed to the other Party. Each Party may change its address by giving the other Party notice thereof in conformity with this Section. Any payments made under this Agreement, if made by mail, shall be deemed to have been made on the date of receipt thereof.
- 27.5 **Exercise of Right.** No failure or delay on the part of either Party in exercising any right, power, or privilege hereunder, and no course of dealing between the Parties, shall operate as a waiver thereof; nor shall any single or partial exercise of any right, power, or privilege hereunder preclude any other or further exercise thereof or the exercise of any other right, power, or privilege.
- 27.6 **Headings.** The descriptive headings of the several Articles, sections, and paragraphs of this Agreement are inserted for convenience only and do not constitute a part of this Agreement. Such headings shall not in any way define or affect the meaning, construction, or scope of any of the provisions hereof.
- 27.7 **Incorporation of Schedules and Exhibits.** The schedules, attachments and exhibits referenced in and attached to this Agreement shall be deemed an integral part hereof to the same extent as if written in whole herein. In the event that any inconsistency exists between the provisions of this Agreement and any schedules, attachments or exhibits attached hereto, the provisions of this Agreement shall supersede the provisions of any such schedules, attachments or exhibits.
- 27.8 **Prior Agreements; Modifications.** This Agreement and the schedules, attachments and exhibits attached hereto constitute the entire agreement between the Parties with respect to the subject matter hereof, and supersede all previous understandings, commitments, or representations concerning such subject matter. Each Party acknowledges that the other Party has not made any representations other than those that are expressly contained herein. This Agreement may not be amended or modified in any way, and none of its provisions may be waived, except by a writing signed by an authorized representative of the Party against whom the amendment, modification, or waiver is sought to be enforced. The Project Managers shall not be authorized representatives within the meaning of this Section.

- 27.9 **Severability.** Whenever possible, each provision of this Agreement shall be interpreted in such manner as to be effective and valid under applicable law, but if any provision hereof shall be prohibited by, or determined to be invalid under, applicable law, such provision shall be ineffective to the extent of such prohibition or invalidity, without invalidating the remainder of such provision or the remaining provisions of this Agreement.
- 27.10 **Nouns and Pronouns.** Whenever the context may require, any pronouns used in this Agreement shall include the corresponding masculine, feminine, or neuter forms, and the singular forms of nouns and pronouns shall include the plural, and vice versa.
- 27.11 **No Third Party Beneficiaries.** Nothing in this Agreement is intended to confer on any person, other than the Parties, any rights or remedies under or by reason of this Agreement.
- 27.12 **Validity; Required Regulatory Approvals.**
- (a) Each Party hereby represents that the provisions of this Agreement constitute valid and legally binding obligations of such Party and are enforceable in accordance with their terms.
- (b) Subject to Section 23.3 of this Agreement, the obligations of each Party under this Agreement are expressly contingent upon (i) each Party receiving all licenses, permits, permissions, certificates, approvals, authorizations, consents, franchises and releases from any local, state, or federal regulatory agency or other governmental agency or authority (which may include, without limitation and as applicable, the NYISO and the NYPSC) or any other third party that may be required for such Party in connection with the performance of such Party's obligations under or in connection with this Agreement (the "Required Approvals"), (ii) each Required Approval being granted without the imposition of any modification or condition of the terms of this Agreement or the subject transactions, unless such modification(s) or condition(s) are agreed to by both Parties in their respective sole discretion, and (iii) all applicable appeal periods with respect to the Required Approvals having expired without any appeal having been made or, if such an appeal has been made, a full, final and non-appealable determination having been made regarding same by a court or other administrative body of competent jurisdiction, which determination disposes of or otherwise resolves such appeal (or appeals) to the satisfaction of both Parties in their respective sole discretion.

(c) Subject to Section 23.3 of this Agreement, if any application or request is made in connection with seeking any Required Approval and is denied, or is granted in a form, or subject to conditions, that either Party rejects, in its sole discretion, as unacceptable, this Agreement shall terminate as of the date that a Party notifies the other Party of such denial or rejection, in which event the obligations of the Parties under this Agreement shall cease as of such date and this Agreement shall terminate, subject to Customer's obligation to pay Company in accordance with the terms of this Agreement (including, without limitation, Section 21.2 hereof) for all Company Reimbursable Costs. All of the Company's actual costs in connection with seeking Required Approvals shall be included within the meaning of the term Company Reimbursable Costs and shall be paid for by Customer.

27.13 **Notices** All formal notices, demands, or communications under this Agreement shall be submitted in writing either by hand, registered or certified mail, or recognized overnight mail carrier to:

To Customer: Mr. Tim Lynch
Energy Services
NYSEG
18 Link Dr.
Binghamton NY 13902
(607) 762-4321

To Company: Mr. William Malee
Director, Transmission Commercial
Niagara Mohawk Power Corporation
d/b/a National Grid
40 Sylvan Road
Waltham, MA 02451
(781) 907-2422

27.14 **Counterparts**. This Agreement may be executed in multiple counterparts, each of which shall be considered an original. The exchange of copies of this Agreement and of signature pages by facsimile or other electronic transmission (including, without limitation, by e-mailed PDF) shall constitute effective execution and delivery of this Agreement as to the Parties and may be used in lieu of the original Agreement for all purposes. Signatures of the Parties transmitted by facsimile or other electronic means (including, without limitation, by e-mailed PDF) shall be deemed to be their original signatures for all purposes.

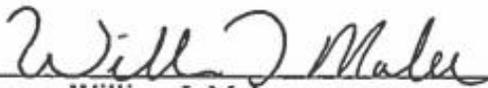
[Signatures are on following page.]

IN WITNESS WHEREOF, each Party has executed this Agreement by its duly authorized representative as of the Effective Date.

NEW YORK STATE ELECTRIC & GAS CORPORATION

By: 
Name: *MARK SULYNG*
Title: *PRESIDENT*

NIAGARA MOHAWK POWER CORPORATION d/b/a National Grid

By: 
Name: William L Malee
Title: Director –Transmission Commercial

LIST OF EXHIBITS

Exhibit A	Scope of Work
Exhibit B	Projected Milestone Schedule
Exhibit C	Insurance Requirements
Exhibit D	Conceptual Engineering Report

Exhibit A: Scope of Work

COMPANY shall perform the following Work under this Agreement:

1. Design, engineer, procure, construct, test and place into service the new Company-owned and/or operated facilities, and the modifications to existing Company-owned and/or operated facilities, as contemplated in the Conceptual Engineering Report contained in Exhibit D to the Agreement.
2. Perform engineering review and field verifications as required on the facilities described in Conceptual Engineering Report contained in Exhibit D to the Agreement.
3. Prepare, file for, and use commercially reasonable efforts to obtain any Required Approvals that must be obtained by Company to enable it to perform the work and any other of its obligations contemplated by this Exhibit and this Agreement.
4. Inspect, review, witness, examine and test, from time to time, Company's work contemplated herein and conduct other project management, administration and oversight activities in connection with the work contemplated by this Exhibit.
5. Review, from time to time, permitting, licensing, real property, and other materials relating to the work contemplated herein.
6. Retain and use outside experts, counsel, consultants, and contractors in furtherance of the work contemplated herein.
7. Perform any other reasonable tasks necessary or advisable in connection with the work contemplated by this Exhibit (including, without limitation, any changes thereto).

For the avoidance of doubt: the Company shall not have any responsibility for seeking or acquiring any real property rights in connection with the Work or the Project including, without limitation, licenses, consents, permissions, certificates, approvals, or authorizations, or fee, easement or right of way interests. Neither this Agreement nor the Company's Work include securing or arranging for Customer or any third party to have access rights in, through, over or under any real property owned or controlled by the Company.

NOTE: COMPANY's specifications for electrical requirements referenced for this Agreement include: ESB-750; ESB-752; ESB-755 and ESB-756, Appendix A as such may be amended, modified and superseded from time to time. See:

https://www.nationalgridus.com/niagaramohawk/construction/3_elec_specs.asp

Exhibit B: Projected Milestone Schedule

PROJECTED MILESTONE SCHEDULE

Task	Milestone	Date	Responsible Party
1.	Preliminary Engineering	11 - 13 weeks after approval to begin	Customer/Company
2.	Final Design	16 -20 weeks	Customer/Company
3.	Material & Equipment Procurement	24-26 weeks	Company
4.	Construction	12-14 weeks	Company
5	Close Out	12 weeks	Customer / Company

The dates above represent the Parties' preliminary schedule, which is subject to adjustment, alteration, and extension.

Exhibit C: Insurance Requirements

- Workers Compensation and Employers Liability Insurance as required by the State of New York. If required, coverage shall include the U.S. Longshore and Harbor Workers' Compensation Act and the Jones Act.
 - Public Liability (Including Contractual Liability), covering all activities and operations to be performed by it under this Agreement, with the following minimum limits:
 - (A) Bodily Injury - \$1,000,000/\$1,000,000
Property Damage - \$1,000,000/\$1,000,000
OR
 - (B) Combined Single Limit - \$1,000,000
OR
 - (C) Bodily Injury and Property Damage per Occurrence - \$1,000,000
General Aggregate & Product Aggregate - \$2,000,000 each
 - Umbrella or Excess Liability, coverage with a minimum limit of \$ 4,000,000.
1. Upon request, either Party shall promptly provide the requesting Party with either evidence of insurance or certificates of insurance evidencing the insurance coverage above. Customer shall provide such certificates or evidence of insurance to Company at the following address:

To: National Grid c/o NIAGARA MOHAWK POWER CORPORATION
Attention: Risk Management, A-4
300 Erie Boulevard West
Syracuse, NY 13202

Company shall provide such certificates or evidence of insurance to Customer at the following address:

To: NYSEG _____
18 Link Dr _____
Binghamton , NY 13902

2. Should any of the above-described policies be cancelled before the expiration date thereof, notice will be delivered in accordance with the policy provisions.
3. If a party fails to secure or maintain any insurance coverage, or any insurance coverage is canceled before the completion of all services provided under this Agreement, and such party fails immediately to procure such insurance as specified herein, then the non-defaulting party has the right but not the obligation to procure such insurance and, at its option, either bill the

cost thereof to the defaulting party or deduct the cost thereof from any sum due the defaulting party under this Agreement.

4. To the extent requested, both Parties shall furnish to each other copies of any accidents report(s) sent to the Party's insurance carriers covering accidents or incidents occurring in connection with or as a result of the performance of the Work for the Project under this Agreement.
5. Each Party shall comply with any governmental and/or site-specific insurance requirements even if not stated herein.
6. By the date that such coverage is required, each Party represents to the other that it will have full policy limits available and shall notify each other in writing when coverages required herein have been reduced as a result of claim payments, expenses, or both.
7. Customer shall name the Company as an additional insured for all coverages except Workers' Compensation and Employers Liability Insurance in order to provide the Company with protection from liability arising out of activities of Customer relating to the Project and associated Work.

Exhibit D: Conceptual Engineering Report

Critical Energy Infrastructure Information Redacted Pursuant to 18 C.F.R. § 388.112

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	ENGINEERING DOCUMENT Report: Project Management	Doc. # RE.09.00.100 Page 1 of 2

Conc. Eng Report For: Luther Forest - Interconnection with NYSEG
115kV/34.5kV station

Version 2.1 - 11/29/10
Version 1.0- 06/24/11

INTRODUCTION

This report describes the conceptual engineering for substations. It includes approval, scope of work, and costs for various conceptual engineering alternatives to the substations. Single line diagrams shall be included.

PURPOSE

The purpose of this report is to define the conceptual engineering for substations.

ACCOUNTABILITY

This report applies to all National Grid personnel involved with the conceptual engineering for substations.

COORDINATION

Coordination shall occur among Substation Engineering and Design, Project Management, Protection, Underground, Distribution Line Services, Transmission Line Engineering, Substation Operation and Maintenance Services, and Meter personnel.

REFERENCES

- Project Management Playbook
- PR.02.00.011 - Conceptual Engineering Checklist

DEFINITIONS

Not Applicable

TRAINING

Project Management Playbook Training

PRINTED COPIES ARE NOT DOCUMENT CONTROLLED.

FOR THE LATEST AUTHORIZED VERSION PLEASE REFER TO THE APPROPRIATE DEPARTMENT WEBSITE OR DOCUMENTUM.

File:RE.09.00.001 Conceptual Engineering Report for Substations

Originating Department:

Sponsor:

App File: **LUTHER FOREST - INTERCONNECTION** WITH NYSEG

Substation Engineering and Design

Donald T. Angell

115kV/34.5kV STATION

nationalgrid		
	ENGINEERING DOCUMENT Report: Project Management	Doc. # RE.09.00.100 Page 2 of 2

Conc. Eng Report For: **Conceptual Engineering Report for Substations** Version 2.1 - 11/29/10
Luther Forest - Interconnection with NYSEG
115kV/34.5kV station **Version 1.0- 06/24/11**

REVISION HISTORY

<u>Version</u>	<u>Date</u>	<u>Description of Revision</u>
1.0	04/14/08	First version of new document based on past practices and comments from Challenge Meetings.
1.1	09/07/08	Approval changed to Manager, Substation Engineering. Added additional rows for Funding, Work Order, and Company Number.
2.0	06/24/10	Converted to new format. Removed Document Number, "Report: Project Management", version and date revised of RE.09.00.100, and "Conc. Eng Report For:" in header of document starting on the 4 th page. Table of Contents relocated to after the Conceptual Engineering Report cover page. Added "\$K +/- 25%" in Cost Column of Summary table. Added Note regarding alternatives and their appropriate sections. Added Notes 1 and 2 to Section 12.0 - Schedule. Defined Closeout as 12 week duration in Section 12.0 - Schedule.
2.1	11/29/10	Summary Table - Added "(-25% to +50%)" in Cost Column Section 1.11 - Revised the study grade cost estimate to be "-25% to +50%." Section 1.11 - Added "This cost estimate was created using(mention PET or SE, as applicable)." Section 1.11 - Replaced "<Replace this text with the PET "Alternative Summary Short Report" here>" with "<Replace this text with the PET "Alternative Summary Short Report" here or include the SE screen shots as an attachment >" Section 1.12 - Revised "includes" to "include" in NOTE .

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FOR THE LATEST AUTHORIZED VERSION PLEASE REFER TO THE APPROPRIATE DEPARTMENT WEBSITE OR DOCUMENTUM.
File:RE.09.00.001 Conceptual Engineering Report for Substations Originating Department: Sponsor:
App File: **LUTHER FOREST - INTERCONNECTION** WITH NYSEG Substation Engineering and Design Donald T. Angell
115kV/34.5kV STATION

nationalgrid		
	ENGINEERING DOCUMENT	Page 1 of 1

Conceptual Engineering Report for Substations

Luther Forest - Interconnection with NYSEG
115kV/34.5kV station

Version 1.0- 06/24/11

Conceptual Engineering Report

For

Luther Forest - Interconnection with NYSEG 115kV/34.5kV station

Funding No. **B10773**, Work Order No. **9000108448** Company No: **36 - Niagara Mohawk Power Corp.**

Funding No. #, Work Order No. # Company No:

Funding No. #, Work Order No. # Company No:

Funding No. #, Work Order No. # Company No:

Prepared By: **Graham Ehret**

Version: **1.0** Date: **06/24/11**

Requested Date: **08/05/11**

Requested by: **Mark Forchilli**

Request Documentation: **EDIS e-mail**

Substation Engineering	<u>Suzan Martuscello</u>	<u>8/22/11</u>
Manager Approval	Sue Martuscello	Date

Protection Engineering	<u>Mark Stqnbro</u>	<u>8/15/11</u>
Manager Approval	Mark Stanbro	Date

Summary	Alternative #	Cost (-25% to +50%)	Project Duration
Recommended Alternative	#2	\$1031K	60wks
	#1	\$992K	59wks
Other Alternatives	#3	\$1142K	62wks
	#4	\$1783.5K	90wks
	#	\$K	

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File:RE.09.00.001 Conceptual Engineering Report for Substations
App File: **LUTHER FOREST - INTERCONNECTION** WITH NYSEG
115KV/34.5KV STATION

Originating Department:
Substation Engineering and Design

Sponsor:
Donald T. Angell

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Conceptual Engineering Report for Substations

Luther Forest - Interconnection with NYSEG
 115kV/34.5kV station

Version 1.0- 06/24/11

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INTRODUCTION

This document describes the scope of work and cost for National Grid (NG) to support New York State Energy and Gas (NYSEG) with the connection of their new 115kV - 34.5kV station to the existing two(2) 115kV busses at the National Grid Luther Forest station. The new NYSEG station site is adjacent and to the south of the existing Luther Forest station. The existing fence will remain and serve as a common station fence between the properties. The fence will continue to be owned and maintained by National Grid. A one-line diagram is provided in section 13.

PROBLEM STATEMENT

NYSEG is planning to build a new 115kV - 34.5kV station on the adjacent property south of the existing NG Luther Forest station. The new NYSEG station will be connected to the existing Luther Forest station by extending the existing 115kV busses from sets of existing NG 115kV disconnect switches to the NYSEG station (Refer to the NYSEG one-line in Section 1.13). National Grid shall work with NYSEG to ensure a safe and reliable connection is created that conforms to both utilities standards for safe operation and maintenance.

1.0 ALTERNATIVE 1

This is to support the construction of a new NYSEG station adjacent to the existing Luther Forest station and extending the existing “77G” and “99G” busses to serve the new station. The following is required; new revenue metering for each bus connection, physical demarcation points for maintenance purposes, modification of the existing bus protection packages to incorporate the bus extension to serve NYSEG, and shared drawings between the two(2) utility companies. The revenue metering location will be located within the existing Luther Forest station. The physical demarcation for maintenance purposes will be at the newly installed NYSEG switch location (This switch will be installed in the NYSEG yard just south of the existing Luther Forest fence line at the south side of the station). National Grid will be the primary owner of the shared drawings and will work with NYSEG to appoint a contact person from each company to maintain these drawings.

SCOPE OF WORK for Alternative 1

1.1 Assumptions and Exceptions

The revenue metering location will be located within the existing Luther Forest station (Refer to Section 1.13 “National Grid / NYSEG Station - 2008 Interconnection Plan”).

The physical point of demarcation will be the newly installed 115kV switches, just south of the existing Luther Forest station fence line (Refer to Section 1.13 “National Grid / NYSEG Station - 2008 Interconnection Plan”).

NYSEG can construct their fence to connect into the existing Luther Forest fence line on the south side of the property.

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The NYSEG ground system is to be installed and connected to the existing Luther Forest station ground system, but NYSEG ground system will have to be tested separately and before the connection is made to the existing Luther Forest ground grid.

The shared drawings and how to issue/update/maintain should be determined during Step 1 of the National Grid process.

The outages can be taken in a timely manner between the two(2) utility companies to allow for construction and also the testing and commissioning of the new equipment.

There will be a minimal amount of soil removal and therefore the soil spoil pile can be located within the existing Luther Forest perimeter fence line.

1.2 Site Work

The point of property separation will be the existing Luther Forest southern fence-line. This fence will be owned and maintained by National Grid (Refer to section 1.13 "Luther Forest Station - Existing Physical layout").

There will be two(2) new rigid conduits installed to create secondary cable paths from the existing "A" trench system to each of the new revenue metering locations.

There will be certain sections of the Luther Forest station that have to be regarded once the in-ground work has been completed.

1.3 Civil/Structural Work

New steel structures will be installed for the new bus supports.

New pier type foundations will be installed for the new bus supports.

New steel structures will be installed as support stands for the new revenue metering equipment.

New pier type foundations will be installed to support the new revenue metering equipment.

1.4 Primary Electrical Work

There are to be six(6) new combo CT/PT revenue metering units installed. Each one will have its own stand and foundation. These units will be similar to the existing six(6) revenue metering units that are presently being used for the Global Foundry 115kV transmission lines 111 and 222.

NYISO Agreements --> Service Agreements --> Cost Reimbursement Agrmnt 2056 btwn NYSEG and Niagara Mohawk

Twelve Bus supports will have to be installed with each one having its own structure and foundation.

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App File: **LUTHER FOREST - INTERCONNECTION** WITH NYSEG

Substation Engineering and Design

Donald T. Angell

115KV/34.5KV STATION

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Luther Forest - Interconnection with NYSEG
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The “77G” and “99G” busses are to be extended southwards from the existing 115kV switches 577 and 499 to the existing Luther Forest southern fence line.

The connection from the new NYSEG disconnect switch to the end of the rigid bus extension is to be bus conductor due to the elevation change in the field. This connection will be made above the existing Luther Forest southern fence line.

The equipment grounds are to be installed and attached to the existing Luther Forest station ground grid. The Luther Forest station ground grid has already been installed and does not need additional installation work.

1.5 Secondary Electrical Work

The AC station service has been reviewed and is adequate for this project.

The DC station service has been reviewed and is adequate for this project.

There is to be new secondary cables installed between the control house and the new revenue metering equipment.

There is an existing location in the Luther Forest station control house in control room “A” for the revenue meters and sockets. This location is on the wall next to the existing revenue meters and sockets for serving Global Foundries.

The revenue metering secondary cables are to be installed with rigid conduit from the CT/PT combo unit to the existing “A” trench and then brought down in the “A” trench with inter-duct into the existing control house (inter-duct color to be determined in Step 2A of the National Grid process).

The “A” and “B” trench systems are to be extended to the existing southern fence line. This will assist in the interconnection required for the protection and control of the two(2) stations.

The path in the new NYSEG station is planned to be conduit from their “A” and “B” trench systems to the National Grid “A” and “B” trench systems respectively.

The CT’s from the NYSEG new 115kV circuit breakers will be added to the “A” and “B” bus differential schemes. There are already spare FT-1 and PK-2 blocks installed to accommodate these CT circuits.

The contacts from the Bus Differential tripping and blocking relays will be wired to trip, block reclose and initiate breaker failure for the NYSEG new 115kV circuit breakers.

NYSEG will provide contacts from their 115 kV circuit breaker failure schemes to trip the 115kV bus for a failed breaker.

NYSEG will provide contacts from their 115 kV circuit breaker failure schemes to trip the 115kV bus for a failed breaker.		

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Contacts will be transmitted between each Company's control house using SEL-2506 contact converters and "A" and "B" fiber connectors between the two(2) stations.

There is space on the existing bus differential panels to add the SEL-2506 relays.

A new circuit will be added in each Bus Pot cabinet to provide NYSEG with 115 kV bus indication to use for the 115kV breaker reclosing and synch check.

Status points from NYSEG will be added to the DFR to indicate breaker status and breaker failure tripping.

1.6 Associated Work

NYSEG will be installing a new 115kV - 34.5kV station.

1.7 Outages Required

There is a conceptual estimate of four(4) outages to help physically connect the two(2) stations and also help test & commission the circuits between the two(2) stations.

1.8 Environmental

The existing Luther Forest station completed construction in the summer of 2010 and there were no environmental issues. Therefore there are no anticipated environmental issues to complete this work.

1.9 Risks and Opportunities

The risks associated with this project are minimal since the original Luther Forest station design was laid out with a future interconnection to a NYSEG station as well as a future National Grid station (Refer to section 1.13 "One Line Diagram").

1.10 License, Permit & ROW

There is no foreseen licensing and/or permits required for this project.

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1.11 Cost Estimate

A study grade estimate has been developed with only the conceptual understanding of the project as described in this report. The estimate has been prepared using historical cost data, data from similar projects and other identified assumptions. The accuracy of this study grade estimate is expected to be 25% to 50%.

	Craft Labor Cost	Material Cost	Engineering Cost	Vendor Cost	Project Management	Equipment Cost	Supervisor Cost	Other Cost	Total Cost
Total Cost									
Storm/Material Handling									
Tax									
Employed Workforce Cost									
Non-Productive Time									
Work Environment									
Overtime									
Overhead									
Transportation									
Telco Backhaul									
Contingency									
ODD									
AFUDC									
Totals	434,226.89	221,584.32	92,927.44	832.61	26,983.10	95,679.99	51,833.00	.00	958,074.35

Capital

Critical Energy Infrastructure Information Redacted Pursuant to 18 C.F.R. § 388.112

	Craft Labor Cost	Material Cost	Engineering Cost	Vendor Cost	Project Management	Equipment Cost	Supervisor Cost	Other Cost	Total Cost
Total Cost									
Storm/Material Handling									
Tax									
Employed Workforce Cost									
Non-Productive Time									
Work Environment									
Overtime									
Overhead									
Transportation									
Telco Backhaul									
Contingency									
ODD									
AFUDC									
Totals	3,336.37	.00	.00	.00	.00	.00	.00	.00	3,336.37

Removal

Critical Energy Infrastructure Information Redacted Pursuant to 18 C.F.R. § 388.112

	Craft Labor Cost	Material Cost	Engineering Cost	Vendor Cost	Project Management	Equipment Cost	Supervisor Cost	Other Cost	Total Cost
Total Cost									
Storm/Material Handling									
Tax									
Employed Workforce Cost									
Non-Productive Time									
Work Environment									
Overtime									
Overhead									
Transportation									
Telco Backhaul									
Contingency									
ODD									
AFUDC									
Totals	427,361.42	291,954.59	92,937.44	832.61	26,983.10	95,679.99	51,833.00	.00	991,499.11

Total

Critical Energy Infrastructure Information Redacted Pursuant to 18 C.F.R. § 388.112

	Y1	Y2	Y3	Y4	Y5	Y6	Total
Yearly Cash Flows	(\$K)	(\$K)	(\$K)	(\$K)	(\$K)	(\$K)	(\$K)
Prelim. Eng.	\$30						\$30
Capital	\$958.5						\$958.5
O&M	\$0						\$0
Removal	\$3.5						\$3.5
Total	\$992						\$992

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1.12 Schedule

Activity	Duration
Preliminary Engineering	11-13 weeks after approval to begin
Final Design	16-20 weeks
Material and Equipment Procurement	24-26 weeks ¹
Construction	12-14 weeks ²
Closeout	12 weeks

- NOTE:**
1. To be performed in parallel with Final Design.
 2. Duration to include the 90 day window.

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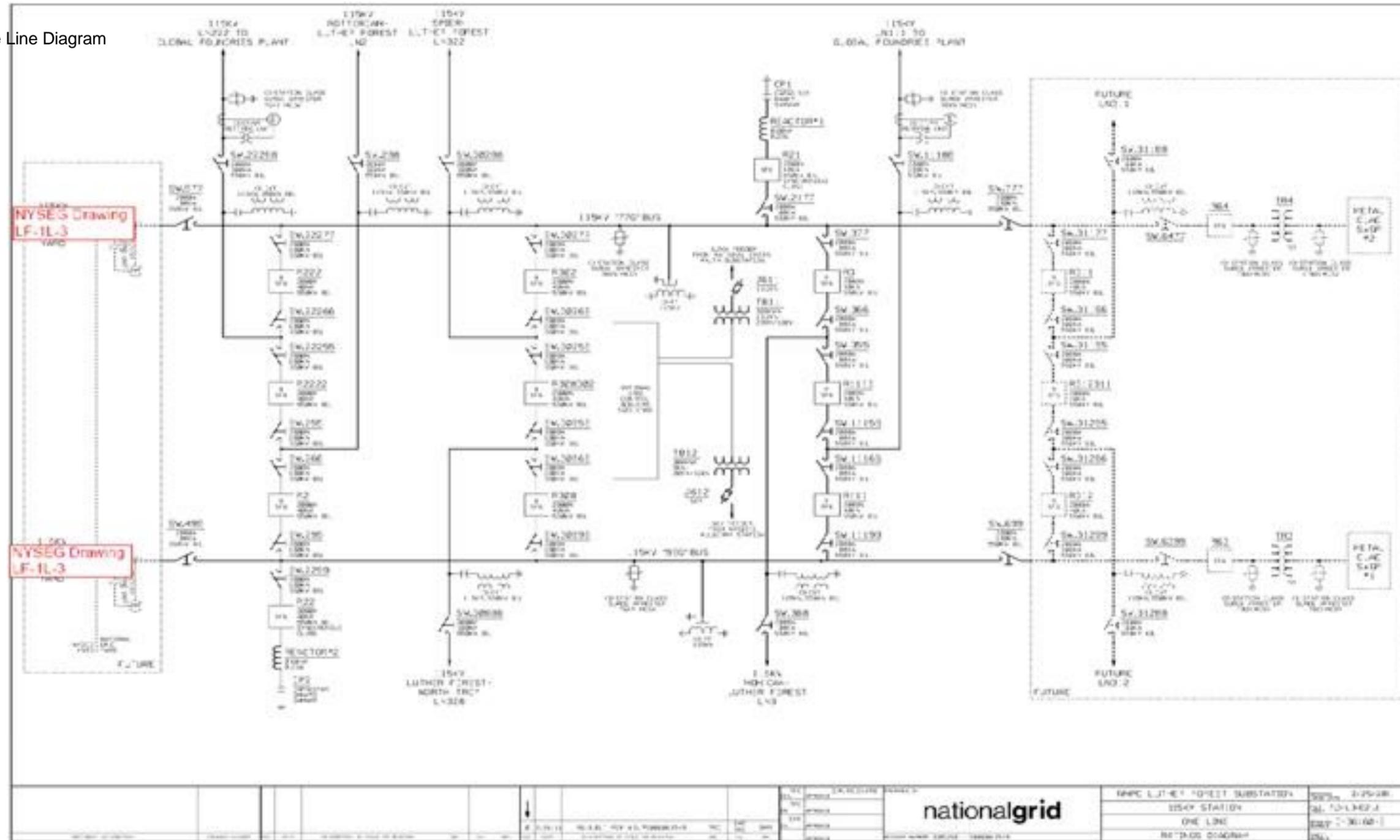
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1.13 One Line Diagram



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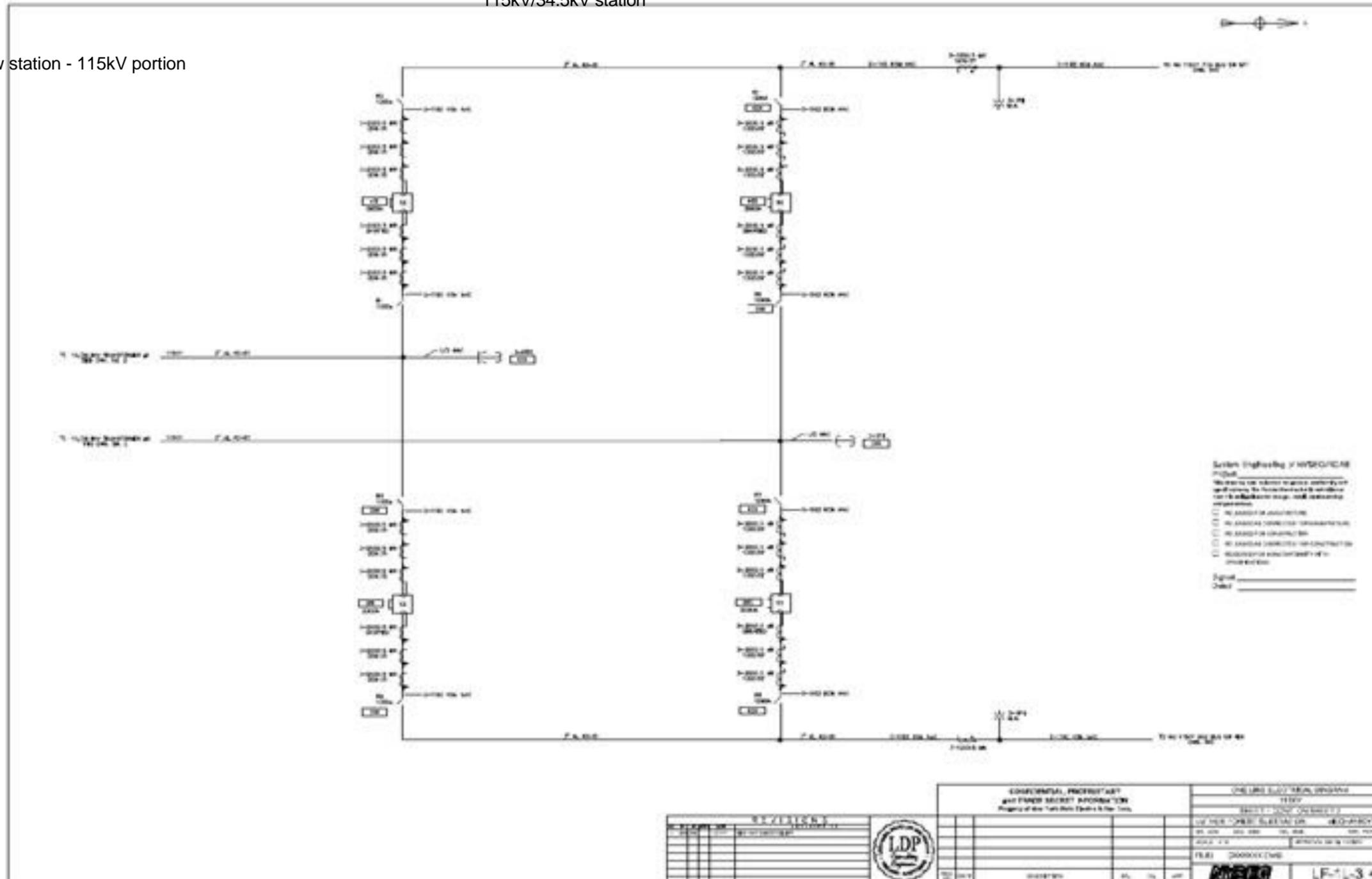
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115kV/34.5kV station

NYSEG: New station - 115kV portion



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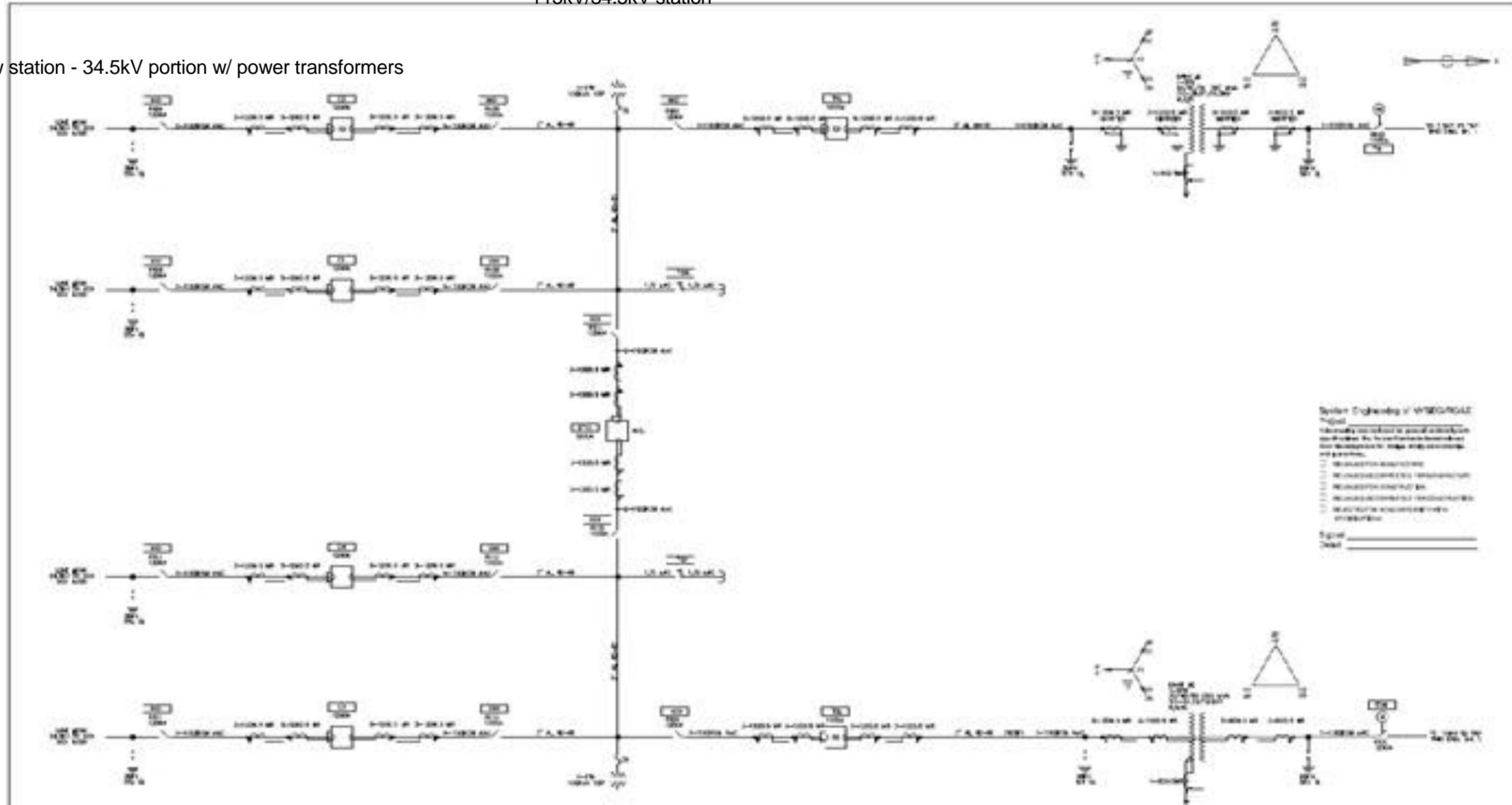
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NYSEG: New station - 34.5kV portion w/ power transformers



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LDP CONSULTING ENGINEERS		SHEET / QUANTITY / TOTAL 11 / 11 / 11	
PROJECT NO. 115KV/34.5KV LUTHER FOREST INTERCONNECTION		DATE 06/24/11	
DRAWN BY: [Name] CHECKED BY: [Name]		FILED: 000000200 LF-1L-4 4/11	

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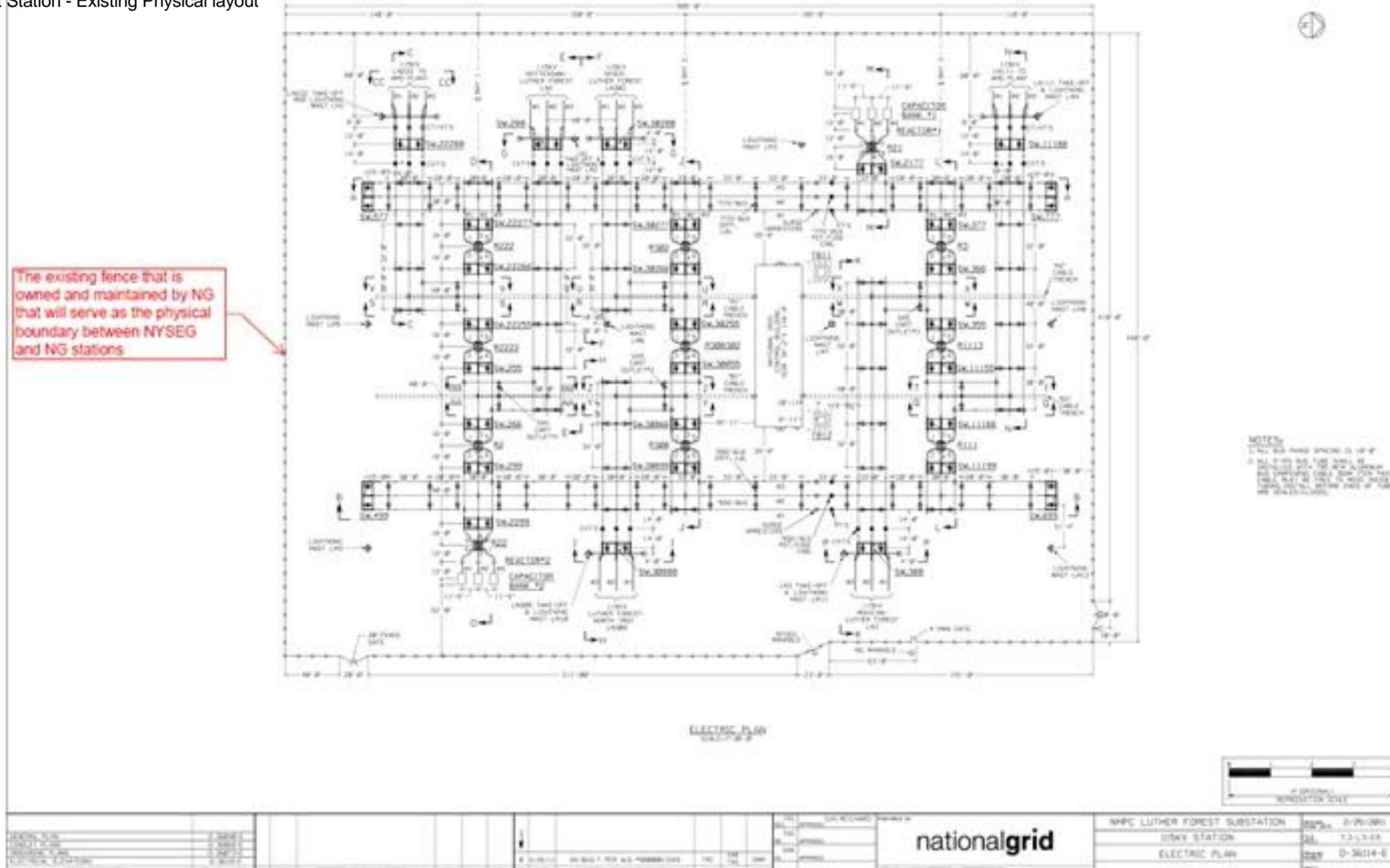
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Luther Forest Station - Existing Physical layout



The existing fence that is owned and maintained by NG that will serve as the physical boundary between NYSEG and NG stations

NOTES:
1. ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE (NEC) AND THE NATIONAL FIRE ALARM AND SIGNAL CODE (NFPA 72).
2. ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH THE NEW YORK STATE ELECTRICAL CONSTRUCTION CODE (NYSECC) AND THE NEW YORK STATE ELECTRICAL REGULATORY BOARD (NYSECRB) REGULATIONS.
3. ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH THE NEW YORK STATE ELECTRICAL REGULATORY BOARD (NYSECRB) REGULATIONS.



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		115KV STATION	1.2-1.1-11
		ELECTRIC PLAN	0-36114-E

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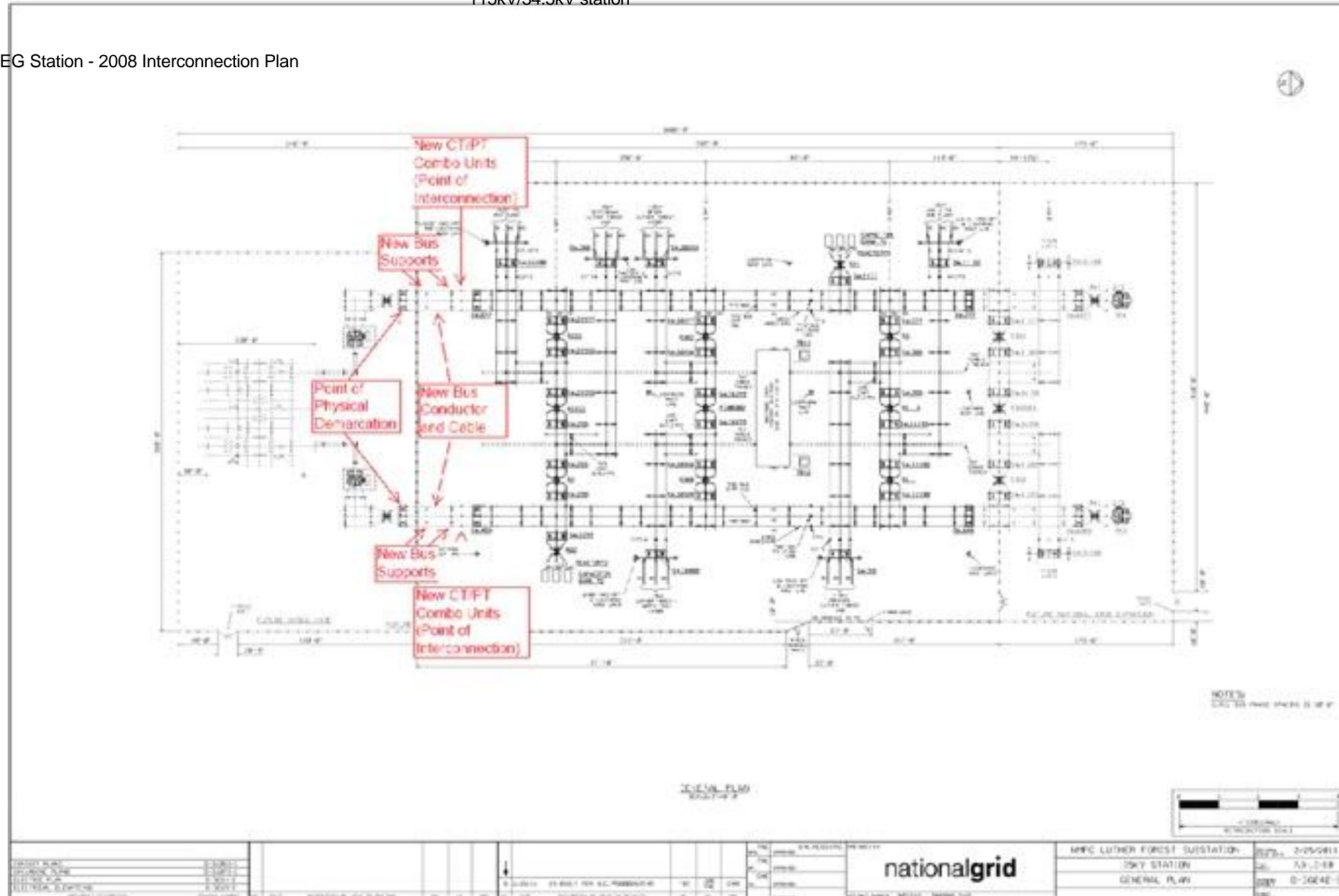
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National Grid / NYSEG Station - 2008 Interconnection Plan



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1.14 Photos/Sketches/Drawings



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2.0 ALTERNATIVE 2 (ELECTRICAL SERVICE BULLITEN - ESB)

This is to support the construction of a new NYSEG station adjacent to the existing Luther Forest station and extending the existing “77G” and “99G” busses to serve the new station. The following is required; new revenue metering for each bus connection, physical demarcation points for maintenance purposes, modification of the existing bus protection packages to incorporate the bus extension to serve NYSEG, and shared drawings between the two(2) utility companies. The revenue metering location will be located within the existing Luther Forest station. The physical demarcation for maintenance purposes will be at the newly installed NYSEG switch location (This switch will be installed in the NYSEG yard just south of the existing Luther Forest fence line at the south side of the station). National Grid will be the primary owner of the shared drawings and will work with NYSEG to appoint a contact person from each company to maintain these drawings.

SCOPE OF WORK for Alternative 2

2.1 Assumptions and Exceptions
Same as Alternative 1

2.2 Site Work
The two(2) new rigid steel conduits are to be installed from both revenue metering locations to the control house. The entry point at the control house for the rigid steel conduits should be at the “A” trench entrance.

The rest of the work will remain the same as Alternative 1

2.3 Civil/Structural Work
Same as Alternative 1

2.4 Primary Electrical Work
Same as Alternative 1

2.5 Secondary Electrical Work
The revenue metering secondary cables are to be installed with rigid conduit from the CT/PT combo unit to the control house and then brought into the control house with inter-duct in the cable trays (inter-duct color to be determined in Step 2A of the National Grid process).

The rest of the work will remain the same as Alternative 1

2.6 Associated Work

2.6 Associated Work		

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- 2.7 Outages Required
Same as Alternative 1

- 2.8 Environmental
Same as Alternative 1

- 2.9 Risks and Opportunities
Same as Alternative 1

- 2.10 License, Permit & ROW
Same as Alternative 1

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Version 1.0- 06/24/11

2.11 Cost Estimate

A study grade estimate has been developed with only the conceptual understanding of the project as described in this report. The estimate has been prepared using historical cost data, data from similar projects and other identified assumptions. The accuracy of this study grade estimate is expected to be 25% to 75%.

	Craft Labor Cost	Material Cost	Engineering Cost	Vendor Cost	Project Management	Equipment Cost	Supervisor Cost	Other Cost	Total Cost
Total Cost									
Storm/Material Handling									
Tax									
Emergency Work Percent									
Non-Productive Time									
Work Environment									
Overtime									
Overhead									
Transportation									
Telco Backout									
Contingency									
COO									
AFUDC									
Totals	403,399.37	297,224.60	94,920.91	839.61	26,589.10	95,639.99	94,924.02	.00	1,027,388.25

Capital

Critical Energy Infrastructure Information Redacted Pursuant to 18 C.F.R. § 388.112

	Craft Labor Cost	Material Cost	Engineering Cost	Vendor Cost	Project Management	Equipment Cost	Supervisor Cost	Other Cost	Total Cost
Total Cost									
Storm/Material Handling									
Tax									
Emergency Work Percent									
Non-Productive Time									
Work Environment									
Overtime									
Overhead									
Transportation									
Telco Backout									
Contingency									
COO									
AFUDC									
Totals	3,334.37	.00	.00	.00	.00	.00	.00	.00	3,334.37

Removal

Critical Energy Infrastructure Information Redacted Pursuant to 18 C.F.R. § 388.112

	Craft Labor Cost	Material Cost	Engineering Cost	Vendor Cost	Project Management	Equipment Cost	Supervisor Cost	Other Cost	Total Cost
Total Cost									
Storm/Material Handling									
Tax									
Emergency Work Percent									
Non-Productive Time									
Work Environment									
Overtime									
Overhead									
Transportation									
Telco Backout									
Contingency									
COO									
AFUDC									
Totals	496,436.56	297,234.60	94,920.91	839.61	26,589.10	95,639.99	94,924.02	.00	1,027,388.25

Total

Critical Energy Infrastructure Information Redacted Pursuant to 18 C.F.R. § 388.112

	Y1	Y2	Y3	Y4	Y5	Y6	Total
Yearly Cash Flows	(\$K)	(\$K)	(\$K)	(\$K)	(\$K)	(\$K)	(\$K)
Prelim. Eng.	\$31						\$31
Capital	\$996.5						\$996.5
O&M	\$0						\$0
Removal	\$3.5						\$3.5
Total	\$1031						\$1031

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File:RE.09.00.001 Conceptual Engineering Report for Substations
App File: **LUTHER FOREST - INTERCONNECTION** WITH NYSEG
115kV/34.5kV STATION

Originating Department:
Substation Engineering and Design

Sponsor:
Donald T. Angell

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Conceptual Engineering Report for Substations

Luther Forest - Interconnection with NYSEG
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2.12 Schedule

Activity	Duration
Preliminary Engineering	11-13 weeks after approval to begin
Final Design	16-20 weeks
Material and Equipment Procurement	24-26 weeks ¹
Construction	13-15 weeks ²
Closeout	12 weeks

- NOTE:**
1. To be performed in parallel with Final Design.
 2. Duration to include the 90 day window.

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2.13 One Line Diagram (Same as Alternative 1)

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2.14 Photos/Sketches/Drawings

Same as Alternative 1

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3.0 ALTERNATIVE 3 (RITZ PTS AND CIRCUIT BREAKERS CTS)

This is to support the construction of a new NYSEG station adjacent to the existing Luther Forest station and extending the existing “77G” and “99G” busses to serve the new station. The following is required; new revenue metering for each bus connection, physical demarcation points for maintenance purposes, modification of the existing bus protection packages to incorporate the bus extension to serve NYSEG, and shared drawings between the two(2) utility companies. The revenue metering location will be located within the existing Luther Forest station. The physical demarcation for maintenance purposes will be at the newly installed NYSEG switch location (This switch will be installed in the NYSEG yard just south of the existing Luther Forest fence line at the south side of the station). National Grid will be the primary owner of the shared drawings and will work with NYSEG to appoint a contact person from each company to maintain these drawings.

SCOPE OF WORK for Alternative 2

3.1 Assumptions and Exceptions
Same as Alternative 1

3.2 Site Work
Additional conduits will be installed between the “A” and “B” trench systems to each of the existing 115kV bus circuit breakers.

The rest of the work will remain the same as Alternative 1

3.3 Civil/Structural Work
Same as Alternative 1

3.4 Primary Electrical Work
There are to be six(6) new PT revenue metering units installed. Each one will have its own stand and foundation.

The rest of the work will remain the same as Alternative 1

3.5 Secondary Electrical Work
There will be new secondary cables separately connected from each of the existing 115kV bus circuit breakers to the control house (control room “A”) and terminated at the new revenue meter and socket location for the new NYSEG station.

The rest of the work will remain the same as Alternative 1

3.6	Associated Work		

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- 3.7 Outages Required
Same as Alternative 1

- 3.8 Environmental
Same as Alternative 1

- 3.9 Risks and Opportunities
Same as Alternative 1

- 3.10 License, Permit & ROW
Same as Alternative 1

3.11 Cost Estimate

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A study grade estimate has been developed with only the conceptual understanding of the project as described in this report. The estimate has been prepared using historical cost data, data from similar projects and other identified assumptions. The accuracy of this study grade estimate is expected to be -25% to +50%.

	Craft Labor Cost	Material Cost	Engineering Cost	Vendor Cost	Project Management	Equipment Cost	Supervisor Cost	Other Cost	Total Cost
Capital									
Total Cost									
Storm/Material Handling									
Tax									
Energized Work Percent									
Non-Productive Time									
Work Environment									
Overtime									
Overhead									
Transportation									
Telco Backout									
Contingency									
COO									
AP/DC									
Totals	961,736.47	309,438.36	126,663.83	826.41	26,526.10	69,629.99	63,772.67	.00	1,128,671.63

Critical Energy Infrastructure Information Redacted Pursuant to 18 C.F.R. § 388.112

	Craft Labor Cost	Material Cost	Engineering Cost	Vendor Cost	Project Management	Equipment Cost	Supervisor Cost	Other Cost	Total Cost
Removal									
Total Cost									
Storm/Material Handling									
Tax									
Energized Work Percent									
Non-Productive Time									
Work Environment									
Overtime									
Overhead									
Transportation									
Telco Backout									
Contingency									
COO									
AP/DC									
Totals	3,334.37	-1.00	.60	.00	.00	-1.00	.00	.00	3,334.97

Critical Energy Infrastructure Information Redacted Pursuant to 18 C.F.R. § 388.112

	Craft Labor Cost	Material Cost	Engineering Cost	Vendor Cost	Project Management	Equipment Cost	Supervisor Cost	Other Cost	Total Cost
Total									
Total Cost									
Storm/Material Handling									
Tax									
Energized Work Percent									
Non-Productive Time									
Work Environment									
Overtime									
Overhead									
Transportation									
Telco Backout									
Contingency									
COO									
AP/DC									
Totals	665,571.04	326,438.83	109,663.83	826.41	26,526.10	69,629.99	63,772.67	.00	1,142,008.87

Critical Energy Infrastructure Information Redacted Pursuant to 18 C.F.R. § 388.112

	Y1	Y2	Y3	Y4	Y5	Y6	Total
Yearly Cash Flows	(\$K)	(\$K)	(\$K)	(\$K)	(\$K)	(\$K)	(\$K)
Prelim. Eng.	\$68.5						\$68.5
Capital	\$1040	\$30					\$1070
O&M	\$0						\$0
Removal	\$0	\$3.5					\$3.5
Total	\$1108.5	\$33.5					\$1142

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3.12 Schedule

Activity	Duration
Preliminary Engineering	12-14 weeks after approval to begin
Final Design	16-20 weeks
Material and Equipment Procurement	24-26 weeks ¹
Construction	16-18 weeks ²
Closeout	12 weeks

- NOTE:**
1. To be performed in parallel with Final Design.
 2. Duration to include the 90 day window.

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3.13 One Line Diagram (Same as Alternative 1)

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3.14 Photos/Sketches/Drawings

Same as Alternative 1

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4.0 ALTERNATIVE 4 (CIRCUIT BREAKERS AND REVENUE METERING)

This is to support the construction of a new NYSEG station adjacent to the existing Luther Forest station and extending the existing “77G” and “99G” busses to serve the new station. The following is required; new revenue metering for each bus connection, physical demarcation points for maintenance purposes, modification of the existing bus protection packages to incorporate the bus extension to serve NYSEG, and shared drawings between the two(2) utility companies. The revenue metering location will be located within the existing Luther Forest station. The physical demarcation for maintenance purposes will be at the newly installed NYSEG switch location (This switch will be installed in the NYSEG yard just south of the existing Luther Forest fence line at the south side of the station). National Grid will be the primary owner of the shared drawings and will work with NYSEG to appoint a contact person from each company to maintain these drawings.

SCOPE OF WORK for Alternative 2

4.1 Assumptions and Exceptions
Same as Alternative 1

4.2 Site Work
New conduits are to be installed from both the “A” and “B” trench systems to both of the new circuit breakers. This will support the existing “A” and “B” separation design as well as allow the interconnection to NYSEG.

The rest of the work will remain the same as Alternative 1

4.3 Civil/Structural Work
A slab type foundation is to be installed per circuit breaker.

The rest of the work will remain the same as Alternative 1

4.4 Primary Electrical Work
There will be two(2) new 115kV, 40kA, 3000A circuit breakers installed, which will match the existing Luther Forest station circuit breakers.

There will be new bus conductor installed to connect the circuit breakers to the rigid bus. (The location of the circuit breakers is referenced in section 4.13)

The rest of the work will remain the same as Alternative 1

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Luther Forest - Interconnection with NYSEG
115kV/34.5kV station

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4.5 Secondary Electrical Work

The relay & control cables are to be installed per the respective trench system from the circuit breaker to the control house to maintain the “A” and “B” separation design that presently exist at Luther Forest station.

New relay & control panels will be added to the lineup and contain control switches and breaker failure relaying for the new National Grid 115kV circuit breakers. CT’s from the new 115kV circuit breakers will be added to the “A” and “B” bus differential schemes. The outputs from the Bus Differential tripping and blocking relays will be wired to trip, block reclose and initiate breaker failure of the new National Grid 115kV circuit breakers.

The new 115kV circuit breakers will also be incorporated into the 115kV bus differential schemes installed in the NYSEG control house. NYSEG will provide contacts from their 115 kV bus differential schemes to initiate breaker failure.

The rest of the work will remain the same as Alternative 1

4.6 Associated Work

Same as Alternative 1

4.7 Outages Required

Same as Alternative 1

4.8 Environmental

Same as Alternative 1

4.9 Risks and Opportunities

The maintenance separation for CT testing will be limited to the two(2) new circuit breakers, instead of the five(5) 115kV bus circuit breakers as in alternatives 1 - 3.

The rest of the risk and opportunities will remain the same as Alternative 1

4.10 License, Permit & ROW

Same as Alternative 1

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115kV/34.5kV STATION

Conceptual Engineering Report for Substations

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4.11 Cost Estimate

A study grade estimate has been developed with only the conceptual understanding of the project as described in this report. The estimate has been prepared using historical cost data, data from similar projects and other identified assumptions. The accuracy of this study grade estimate is expected to be -25% to +50%.

	Craft Labor Cost	Material Cost	Engineering Cost	Vendor Cost	Project Management	Equipment Cost	Supervision Cost	Other Cost	Total Cost
Total Cost									
Stones/Handling									
Tax									
Emergency Work Percent									
Non-Productive Time									
Work Environment									
Overtime									
Overhead									
Transportation									
Telco Backout									
Contingency									
COB									
APUDC									
Totals	963,173.99	528,782.38	124,406.20	835.61	26,585.10	69,633.96	66,730.11	.00	1,783,152.99

Capital

Critical Energy Infrastructure Information Redacted Pursuant to 18 C.F.R. § 388.112

	Craft Labor Cost	Material Cost	Engineering Cost	Vendor Cost	Project Management	Equipment Cost	Supervision Cost	Other Cost	Total Cost
Total Cost									
Stones/Handling									
Tax									
Emergency Work Percent									
Non-Productive Time									
Work Environment									
Overtime									
Overhead									
Transportation									
Telco Backout									
Contingency									
COB									
APUDC									
Totals	3,324.87	.00	.00	.00	.00	.00	.00	.00	3,324.87

Removal

Critical Energy Infrastructure Information Redacted Pursuant to 18 C.F.R. § 388.112

	Craft Labor Cost	Material Cost	Engineering Cost	Vendor Cost	Project Management	Equipment Cost	Supervision Cost	Other Cost	Total Cost
Total Cost									
Stones/Handling									
Tax									
Emergency Work Percent									
Non-Productive Time									
Work Environment									
Overtime									
Overhead									
Transportation									
Telco Backout									
Contingency									
COB									
APUDC									
Totals	966,508.16	528,782.38	124,406.20	835.61	26,585.10	69,633.96	66,730.11	.00	1,783,487.99

Total

Critical Energy Infrastructure Information Redacted Pursuant to 18 C.F.R. § 388.112

	Y1	Y2	Y3	Y4	Y5	Y6	Total
Yearly Cash Flows	(\$K)	(\$K)	(\$K)	(\$K)	(\$K)	(\$K)	(\$K)
Prelim. Eng.	\$68.5						\$68.5
Capital	\$1311.5	\$400					\$1711.5
O&M	\$0						\$0
Removal	\$0	\$3.5					\$3.5
Total	\$1380	\$403.5					\$1783.5

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4.12 Schedule

Activity	Duration
Preliminary Engineering	12-14 weeks after approval to begin
Final Design	28-36 weeks
Material and Equipment Procurement	24-26 weeks ¹
Construction	28-30 weeks ²
Closeout	12 weeks

- NOTE:**
1. To be performed in parallel with Final Design.
 2. Duration to include the 90 day window.

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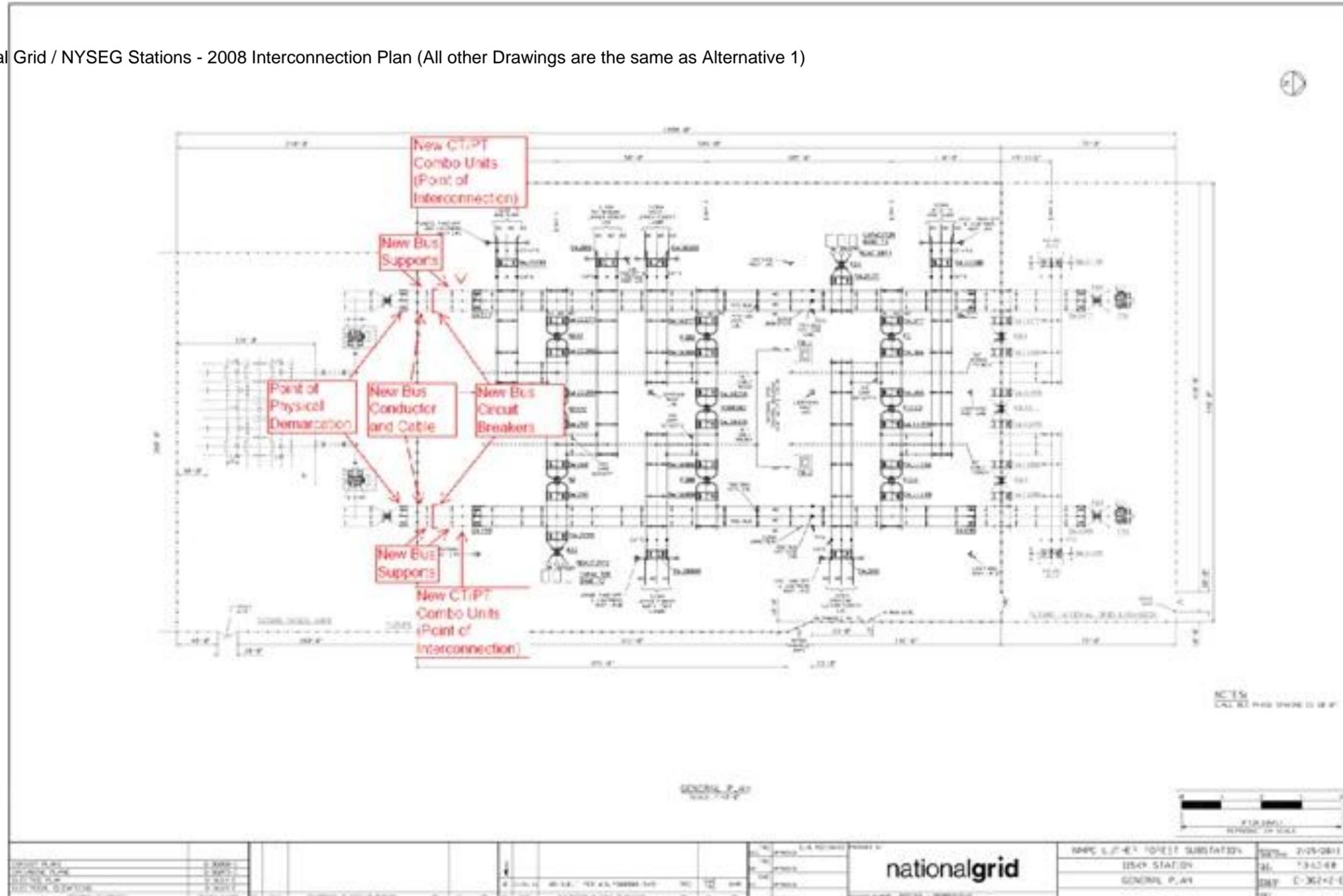
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4.13 National Grid / NYSEG Stations - 2008 Interconnection Plan (All other Drawings are the same as Alternative 1)



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4.14 Photos/Sketches/Drawings

Same as Alternative 1

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5.0 REVISION HISTORY OF PROJECT DOCUMENT

<u>Version</u>	<u>Date</u>	<u>Description of Revision</u>
1.0	08/05/11	Initial version of document. Based on site visit, discussions with field personnel and review of drawings.

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