7

Interconnection and Deliverability Plan

attentive energy

Section 7 Table of Acronyms

Acronym	Abbreviation
AC	Alternating Current
AE1	Attentive Energy One
[redacted]	[redacted]
COD	Commercial Operation Date
CPNY	Clean Path New York
FERC	Federal Energy Regulatory Commission
[redacted]	[redacted]
HVDC	High-Voltage Direct Current
[redacted]	[redacted]
kV	Kilovolt
MW	Megawatts
NYCA	New York Control Area
NYISO	New York Independent System Operator
NYSERDA	New York State Energy Research and Development Authority
OATT	Open Access Transmission Tariff
OCS	Outer Continental Shelf
OREC	Offshore Wind Renewable Energy Certificate
[redacted]	[redacted]
POI	Point of Interconnection
[redacted]	[redacted]
Rise	Refers to Rise Light & Power, LLC. In certain instances, "Rise" may also refer to one or more of Rise's affiliate entities, Queensboro OSW01 Holdings, LLC, Queensboro Development, LLC, or Ravenswood Operations, LLC, all of which are under common ownership and control
SDU	System Deliverability Upgrade
SRIS	System Reliability Impact Study
SSC	Short Circuit Current
SUF	System Upgrade Facility
TCC	Transmission Congestion Contract
VSC	Voltage Source Converter
WTG	Wind Turbine Generator
XLPE	Cross-linked Polyethylene

Section 7 Table of Contents

7. Interconnection and Deliverability Plan

AE1 – A Highly-Matured, Low-Risk Project

AE1's interconnection and deliverability is based on rights it has to the Queensboro Renewable Express, a highly mature transmission project that will deliver offshore wind directly to the Ravenswood Generating Station Site and connect to the Rainey 345kV substation in Zone J. The Queensboro Renewable Express is being developed by Rise as part of Queensboro Development, a planned offshore transmission project consisting of two HVDC transmission facilities. [redacted]

[redacted]

[redacted]

[redacted]

7.1 The Components of Attentive Energy's Matured, Low Risk Interconnection

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

Figure 7-1. Export Cable Corridor through State Waters as Proposed in the Queensboro Renewable Express NYS Article VII Application

7.2 Detailed Routing and Interconnection Approach

[redacted]

7.2.1 Offshore Substation

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

7.2.2 HVDC Cable

[redacted]

A mapbook with detailed maps of the route is included as Attachment 4.3-B.

7.2.3 Offshore route

7.2.4 Onshore route

[redacted]

[redacted]

[redacted]

[redacted]

7.2.5 Onshore HVDC Converter Structure and Interconnection

[redacted]

[redacted] Key systems include a 345 kV cable that will terminate into the existing ring bus at the Rainey substation which is owned and operated by Con Edison in NYISO's Zone J.

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

7.3 Evidence of Interconnection Request

[redacted]

7.4 NYISO Interconnection Process and Timeline

[redacted] The NYISO has outlined the Cluster Study process as follows:

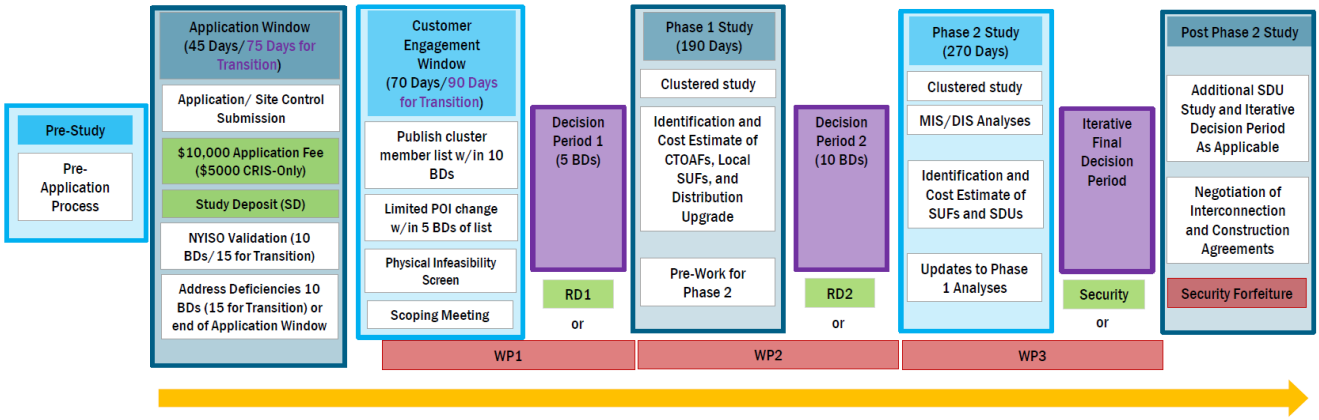

Figure 7-8 NYSO's Standard Interconnection procedures overview (reproduced from NYISO)

[redacted] This allows sufficient time for the Project to meet the proposed COD.

7.4.1 Attentive Energy in NYISO

Attentive Energy's participation in NYISO will be guided by the experience of the Sponsors. Attentive Energy intends to be the NYISO market participant for the Project with support from a third-party energy manager, similar to how Rise manages Ravenswood Generating Station today.

[redacted]

7.4.2 Sponsor Experience with NYISO Markets

Rise has years of experience operating in the NYISO markets and is actively engaged with the NYISO staff both directly and through the various stakeholder working groups. Over the last two decades, Rise has navigated the ongoing evolution of the NYISO market tariff and maintains a comprehensive understanding of the various products, markets, and proposed changes to market rules that may occur as NYISO grid transitions to renewables. [redacted]

The Rise Commercial team's experience provides Attentive Energy with the ability to not only successfully operate the Project in the NYISO market, but to anticipate and adapt to the changes that are inevitable with the grid's transformation under the Climate Act. With respect to NYISO OATT, Services Tariff, as well as applicable State and Federal regulatory activities, the Proposer has been, and continues to be, very active in NYISO stakeholder processes as well as all relevant State and Federal regulatory proceedings.

TotalEnergies is an active participant in the NYISO markets through its New York based renewable generation portfolio. Most recently TotalEnergies began construction of New York State's largest onsite solar generating and storage system at John F. Kennedy International Airport in partnership with the Port Authority of New York and New Jersey and the New York Power Authority. This facility is expected to be placed in service in phases during 2025 and 2026.

7.5 Expected NYISO Interconnection Cost Allocation

[redacted]

[redacted]

[redacted]

7.6 Expected Transmission Infrastructure Costs

[redacted]

[redacted]

7.7 Point of Interconnection

7.7.1 Project Delivery [redacted]

The Project will be connecting and injecting power [redacted]

7.7.2 Available Capacity at POI

Ravenswood Generating Station is connected to the broader NYISO transmission system through the 345 kV Rainey Substation. Given the historical use of Ravenswood Generating Station for power generation, the transmission systems at the Rainey Substation were designed to accommodate injection of approximately 2,500 MW of fossil-fueled generation capacity directly from Ravenswood Generating Station.

[redacted]

7.7.3 Interconnection Facilities Single Line Diagram

Figure 7-7 provides an illustration of the electrical configuration of this interconnection.

7.8 Power Grid Benefits

[redacted]

[redacted]

7.9 Meshed Ready Components

Attentive Energy has reviewed NYSERDA ORECRFP24-1 Appendix "F" Meshed Ready Technical Requirements (Released July 17, 2024) and proposes a technical solution consistent with all known performance requirements.

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LIST OF ATTACHMENTS

SECTION 7 Interconnection and Deliverability Plan

Attachment 7-A: [redacted]

Attachment 7-B: [redacted]

Attachment 7.1-A: [redacted]

Energy and Capacity Deliverability Interconnection Studies for Project C24-036

Prepared for

Rise Light & Power

v16

Revision History

[redacted]

Contents

[redacted]

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Section

1

[redacted]

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Section

2

Capacity Deliverability Study for Project

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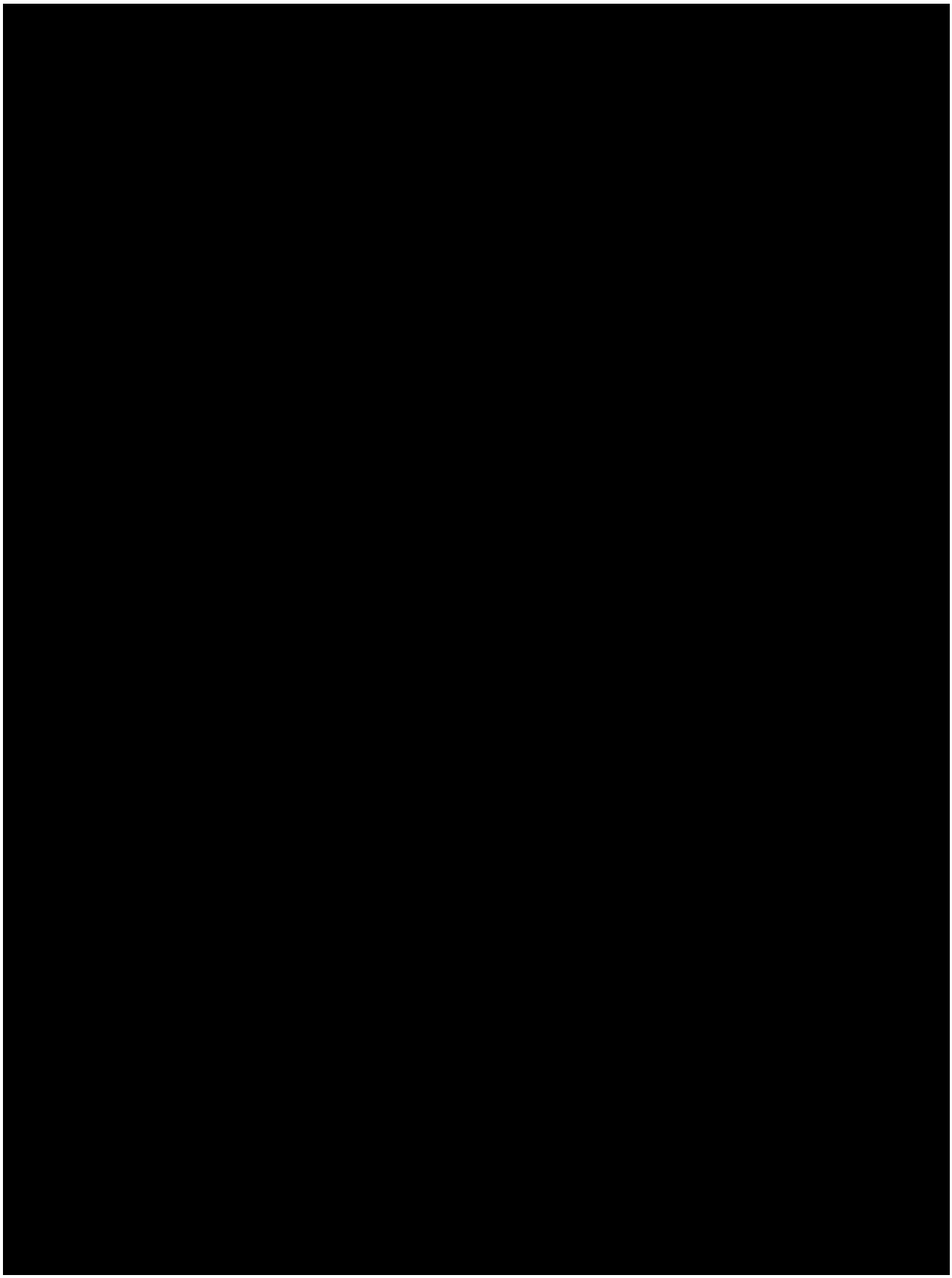
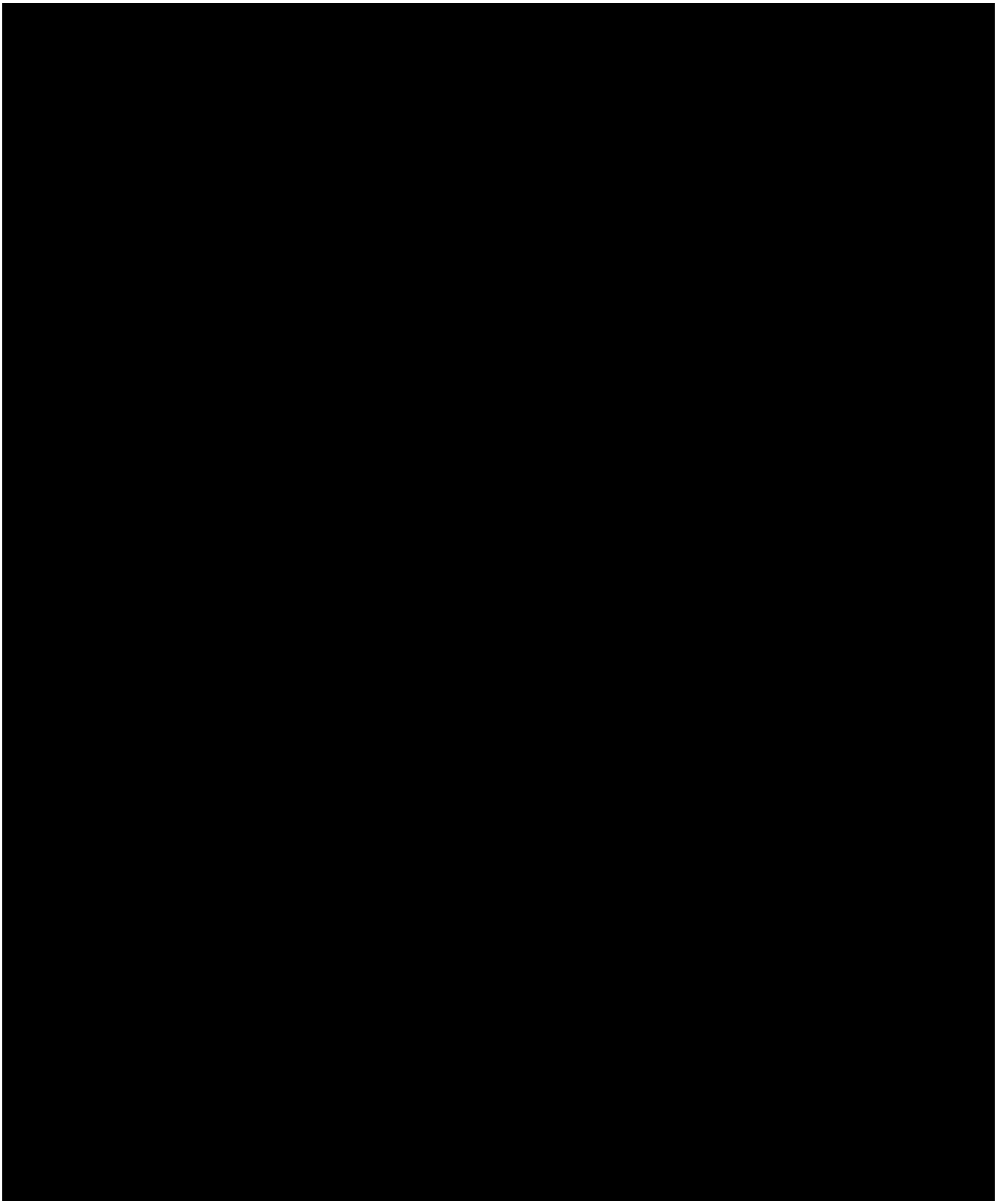
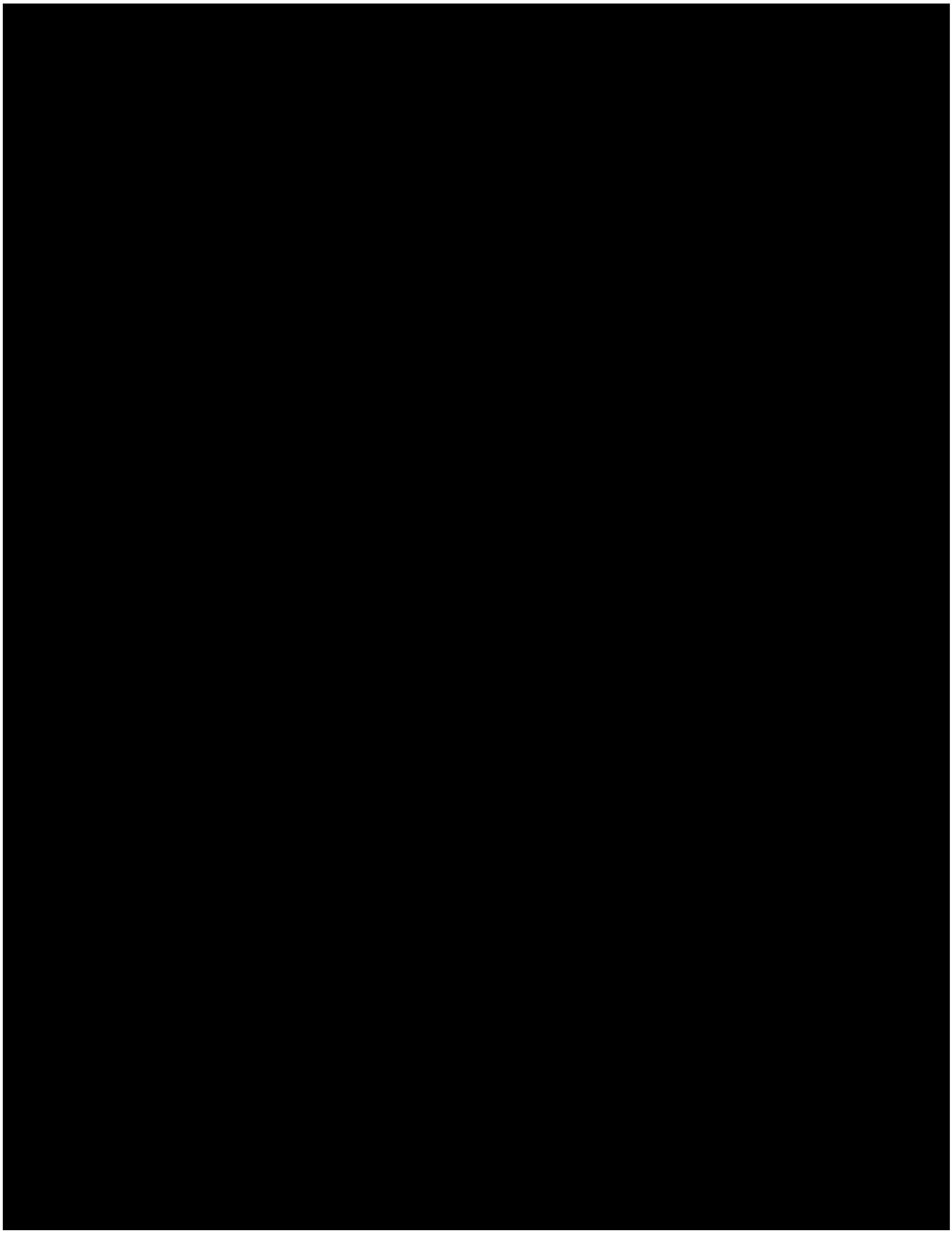
[redacted]







Appendix

A

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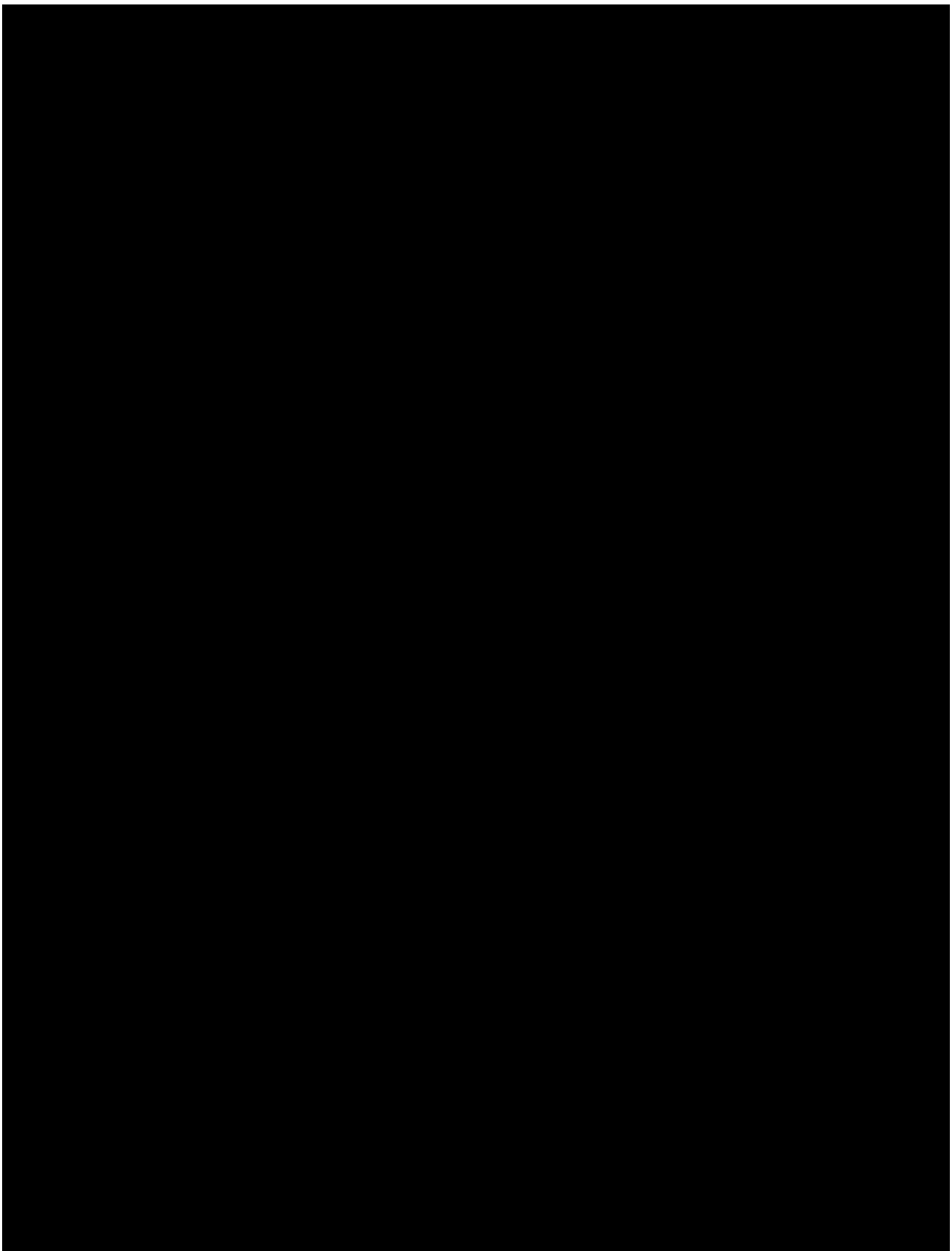

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[redacted]

[redacted]

Proposed One Line Diagram - Attentive Energy to Rainey