

Trimble County Generating Station
Coal Combustion Residuals Treatment Project

Engineering, Procurement and
Construction Agreement

Between
Louisville Gas and Electric Company,
and
Kentucky Utilities Company,
and
Indiana Municipal Power Agency,
and
Illinois Municipal Electric Agency,
collectively, as Owner

and

Amec Foster Wheeler Kamtech, Inc.,
as Contractor

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ENGINEERING, PROCUREMENT AND CONSTRUCTION AGREEMENT

This Engineering, Procurement and Construction Agreement ("**Agreement**") is entered into as of the 7th day of April 2016 ("**Effective Date**"), by and between Louisville Gas and Electric Company, a Kentucky corporation ("**LG&E**"), Kentucky Utilities Company, a Kentucky corporation ("**KU**"), Indiana Municipal Power Agency, a body corporate and politic and a political subdivision of the State of Indiana ("**IMPA**"), and Illinois Municipal Electric Agency, a body politic and corporate, municipal corporation and unit of local government of the State of Illinois ("**IMEA**" and collectively with LG&E, KU, and IMPA, "**Owner**"), and Amec Foster Wheeler Kamtech, Inc., a Delaware corporation ("**Contractor**").

RECITALS

WHEREAS, Owner desires to enter into an agreement with a qualified contractor to design, engineer, procure, construct, start-up, commission, and test the Trimble County Generating Station Coal Combustion Residuals Treatment Project (as hereinafter defined) on a lump-sum turnkey basis as set forth in this Agreement;

WHEREAS, Contractor represents that it is qualified to design, engineer, procure, construct, start-up, commission and test the Facility and desires to perform all work and services in connection therewith on a lump-sum turnkey basis in accordance with the requirements and provisions of this Agreement; and

WHEREAS, Contractor agrees to perform the Work as more specifically described in this Agreement.

NOW, THEREFORE, in consideration of the foregoing and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties, intending to be legally bound, do hereby agree as follows:

ARTICLE 1**DEFINITIONS**

1.1 Definitions. The following terms have the respective meanings specified in this **Article 1** when capitalized and used in this Agreement or in any notice delivered under or in respect of this Agreement.

"**Acceptable Credit Bank**" means a United States based bank, or a bank with a major United States based branch, acceptable to Contractor and Owner, the long term senior debt obligations of which are rated "A-" or better by Standard & Poor's (S&P) or "A3" or better by Moody's (or an equivalent rating from an equivalent rating agency as may be approved by Contractor and Owner), or whose obligations are guaranteed, insured, or otherwise credit enhanced by a bank or financial institution, the long term senior unsecured debt obligations of which are so rated and is United States based or has a major United States based branch.

"**Acceptable Letter of Credit**" means an irrevocable, unconditional standby letter of credit issued by an Acceptable Credit Bank to which Owner is the beneficiary (i) having a stated

expiration date of not earlier than 364 Days (or such longer term as may be commercially available) after the date of the original issuance or any renewal thereof; (ii) that automatically renews or permits Owner, on the signature of an authorized representative of Owner, to draw on sight all or any portion of the stated amount if not renewed on or prior to the thirtieth (30th) Day prior to any expiration date of the letter of credit, including the final expiration date; (iii) that is payable or negotiable at an office of such Acceptable Credit Bank (or a correspondent bank thereof) in New York City or such other place as the Parties may agree; (iv) which is payable in United States Dollars in immediately available funds; and (v) that is governed by the International Standby Practices, International Chamber of Commerce Publication No. 590 (ISP98), and any amendments or revisions thereto, and, to the extent not governed thereby, the laws of the State of New York; and (vi) that is drawable upon issuance of a drawing certificate signed by an authorized representative of Owner stating that Owner is entitled to be paid under the Agreement; and (vii) that is otherwise in the form set forth in **Exhibit F-10**.

“**Adjustment**” means an equitable adjustment, determined in accordance with the Adjustment Methodology, made to the Contract Price and Major Contract Milestones (based on critical path impact), or other applicable provision of this Agreement with respect to a Change Order or an Excusable Event.

“**Adjustment Methodology**” has the meaning specified in **Section 10.1**.

“**Affiliate**” means with respect to a specified Person any other Person that, directly or indirectly, through one or more intermediaries, controls, is controlled by, or is under common control with, the specified Person.

“**Agreed Rate**” has the meaning set forth in **Section 25.9**.

“**Agreement**” has the meaning set forth in the first paragraph hereof and includes the Body of this Agreement and all Exhibits herein referenced, as amended, modified or supplemented from time to time.

“**Applicable Credits**” has the meaning set forth in **Section 8.3**.

“**Applicable Law**” means any applicable statute, law (including common law), rule, treaty, regulation, code, ordinance, permit, approval, injunction, judgment, decree, writ, order or the like, including NERC Requirements, Codes, and Permits, when issued, enacted, or promulgated by a Governmental Authority and interpretations thereof by a Governmental Authority.

“**Application for Payment**” means a written request by Contractor to Owner for payment, completed in the form required by **Exhibit F-1** together with the documentation required by **Section 8.6**.

“**As-Built Drawings**” means: (i) all drawings prepared in the performance of the Work that are “issued for construction” by Contractor and (ii) all of the drawings specified by Owner in **Exhibit A, Exhibit V, and Exhibit X** in each case as modified and updated to accurately show the final actual design and construction of the Work upon Final Completion.

“**Basis of Bid**” has the meaning set forth in **Section 4.41**.



“**Body of this Agreement**” means the first paragraph of this Agreement through the execution page.

“**Bottom Ash Subproject**” means that portion of the Facility designated in **Exhibit A** as the Bottom Ash Subproject.

“**Business Day**” means any Day other than a Saturday, Sunday, or a holiday observed by the United States federal government, the Commonwealth of Kentucky, or the Owner.

“**Buydown Performance Guarantees**” means those Performance Guarantees for which liquidated damages are specifically provided in **Section 1.2** of **Exhibit L**.

“**CCR**” means coal combustion residuals.

“**Certificate**” means the applicable Certificate of Tie-in, Mechanical Completion, Substantial Completion, Commercial Operation, or Final Completion, as the case may be.

“**Certificate of Commercial Operation**” will be in the form set forth in **Exhibit F-2**.

“**Certificate of Final Completion**” will be in the form set forth in **Exhibit F-2**.

“**Certificate of Mechanical Completion**” will be in the form set forth in **Exhibit F-2**.

“**Certificate of Substantial Completion**” will be in the form set forth in **Exhibit F-2**.

“**Certificate of Tie-in**” will be in the form set forth in **Exhibit F-2**.

“**Change Determination Request**” has the meaning specified in **Section 9.2.3**.

“**Change in Law**” means an amendment, modification, or other change of Applicable Law published, enacted, adopted, issued, or promulgated after the Effective Date by a Governmental Authority. A change in Applicable Law with respect to any of the following will not constitute a Change in Law hereunder: (i) taxes or levies assessed on the basis of Contractor’s income, profits, revenues, gross receipts; (ii) other taxes, duties or imposts for which Contractor is responsible hereunder; (iii) taxes, levies or withholdings that vary the compensation, benefits or amounts to be paid to, on behalf of or on account of Contractor’s or Subcontractors’ employees; and (iv) amendments, modifications, or other changes in Applicable Law published, enacted, adopted, issued, or promulgated before the Effective Date whether or not such changes became effective after the Effective Date.

“**Change Order**” has the meaning set forth in **Section 9.2.2**.

“**Change(s)**” has the meaning set forth in **Section 9.2.2**.

“**Claim Notice**” has the meaning set forth in **Section 20.3.1**.

“**Claims**” means claims, causes of action, proceedings, demands or suits.

“**Climatic Condition**” means a weather condition that is unusually severe and abnormal such as hurricane force winds, tornado force winds, or flooding (at a fifty (50) year or greater level).

“**Codes**” means the most recent edition of the codes, standards, and guidelines applicable to the Work, including those listed in **Exhibit N**.

“**Commercial Operation**” will be determined on a Subproject by Subproject basis and will have been achieved when all of the following have occurred with respect to that Subproject: (i) Mechanical Completion has occurred; (ii) the Work is complete (except Punch List Items and Work required during the Warranty Period, as it may be extended); (iii) all Performance Guarantee Tests have been successfully completed in accordance with this Agreement, including **Exhibit G**, and Contractor has completed making necessary and desirable system adjustments identified during the start-up and testing process; (iv) all Performance Guarantees (other than Buydown Performance Guarantees and Guaranteed Availability) have been simultaneously achieved in a single Commercial Operation Test and each Buydown Performance Guarantee has either been achieved or its applicable liquidated damages (including any provisional liquidated damages as provided for by **Section 1.2.2 of Exhibit L**) have been paid by Contractor; (v) all obligations of Contractor expressly required to have been performed as of the Commercial Operation Date have been properly discharged; (vi) the Subproject is capable of being operated in the normal course of business in compliance with Prudent Utility Practices and the standard written procedures and requirements of the Subcontractor that manufactured each item of Equipment up to individual full Unit generating capacity and up to the full capacity of the Facility; (vii) Owner has received from Contractor all Permits (other than Owner Permits) (including Permits necessary to allow occupancy and transfer of care, custody, and control of the Subproject to Owner), all of which shall be valid and in full force and effect; (viii) all liquidated damages incurred pursuant to **Article 7** through the date of Commercial Operation have been paid to Owner; (ix) all training required by **Section 4.9** has been completed; (x) levels of Consumables associated with the Subproject are fully charged and filled; (xi) final versions (subject to updates for changes to the Work made after Commercial Operation) of the Operating and Maintenance Manuals, approved by Owner, have been delivered; (xii) each drawing prepared in the performance of the Work and issued for construction shall have been made current as of the Commercial Operation Date (either marked showing as-built conditions or supplemented with an As-Built Drawing) and delivered to Owner; (xiii) all Special Tools and spare parts have been delivered to Owner; (xiv) other submittals required to be submitted prior to or as a condition of Commercial Operation have been submitted to Owner; and (xv) Owner has executed the Certificate of Commercial Operation.

“**Commercial Operation Date**” means with respect to a Subproject, the date on which Commercial Operation is achieved for that Subproject.

“**Commercial Operation Test**” has the meaning set forth in **Exhibit G**.

“**Component**” means any and all of the constituent parts of the Work that are permanently incorporated into the Facility or otherwise retained by Owner following Final Completion. Components include systems, subsystems, subassemblies, materials and equipment (including parts, machinery, special tools, instruments, pipes, valves, software, Computer Programs, and

hardware), spare parts, and every item of whatever nature, including all documentation related thereto.

“**Computer Program(s)**” means a sequence of instructions, data, or equations in any form, and explanations thereof, intended to cause a computer, a control data processor or the like to perform any kind of operation, which is provided by Contractor or Subcontractors under this Agreement.

“**Confidential Information**” has the meaning set forth in **Section 18.1**.

“**Connect**” means the provision by Contractor of all labor, Equipment, Consumables, and Construction Aids to effect the connection of the Facility at the applicable Terminal Points.

“**Construction Aids**” means all equipment (including construction equipment), apparatus, tools, supplies, construction tools, personal protection equipment, safety supplies, support services, field office equipment, supplies, structures, apparatus, form lumber, protective fencing, Computer Programs used in the execution, management, maintenance or completion of the Work and other goods and items that are required to construct, clean, commission, or test the Facility, but which are neither incorporated into the Work nor retained by Owner.

“**Consumables**” means items such as compressed air or gases, chemicals, oils, lubricants, cleaning materials, demineralized water, valve packing, lamps, light bulbs, gaskets, fuel filters and comparable items which, by normal industry practices, are considered consumables and are replaced on a regular basis, required for cleaning, preparing, or completing the Work or are required for the proper operation of the Facility or the Work.

“**Contingency Arrangements**” means with respect to each Subproject, an alternate method to meet the Minimum Required Performance in the event that the Subproject itself cannot meet the Minimum Required Performance.

“**Contract Price**” has the meaning set forth in **Section 8.1**.

“**Contract Security**” means the Performance Securities and any amounts then held by Owner as cash security for the performance of Contractor’s obligations.

“**Contract Security Release Conditions**” means (i) the applicable event triggering the release listed in **Section 8.13 (i through iii)** has occurred, (ii) no Contractor Default exists or is inchoate, (iii) Contractor is not liable to Owner for unpaid amounts, including liquidated damages, and (iv) no Claim (including a warranty claim) has been made by Owner against Contractor that has not been resolved.

“**Contractor**” has the meaning set forth in the preamble of this Agreement.

“**Contractor Default**” has the meaning set forth in **Section 24.2.1**.

“**Contractor Hazardous Substances**” means the Hazardous Substances or conditions described in either (i) **clauses (a) through (e)** of **Section 19.1.1(ii)** and/or (ii) **Section 19.1.3**.

“**Contractor Indemnitees**” has the meaning set forth in **Section 20.2**.

“**Contractor Outage End Time**” means with respect to (i) a Scheduled Tie-in Outage Period, the date and time specified therefor in **Exhibit D** as such time and date may be adjusted pursuant to this Agreement and (ii) any other outage (of any kind) where Owner allows Contractor access to a Unit or Yard System, the date and time as specified by Owner at the start of such outage when Contractor must be entirely withdrawn from the Unit or Yard System.

“**Contractor Response**” has the meaning set forth in **Section 10.2**.

“**Contractor’s Representative**” has the meaning set forth in **Section 4.6**.

“**Contractor Taxes**” has the meaning specified in **Section 8.2.1**.

“**Culpable Conduct**” means willful misconduct or the failure (by act or omission) to exercise the standard of care that a reasonably prudent Person would have exercised in a similar situation.

“**Day**” means a calendar day, including Saturdays, Sundays and legal holidays.

“**DBE**” means a disadvantaged business enterprise (other than an MBE or WBE) Certified as being at least 51% owned by one or more individuals that are members of one disadvantaged group (or in case of any publicly owned business, at least 51% of the stock of which is owned by one or more individuals that are members of one disadvantaged group) whose management and daily business operations are controlled by one or more such individuals. Disadvantaged groups are those with respect to which the Small Business Administration recognizes disadvantaged businesses.

“**DBE Spend**” means expenditures with respect to this Agreement by Contractor and Subcontractors with DBEs.

“**Defect**” (and derivative forms thereof, *e.g.*, “**Defective**”) means a defect, deficiency, error, omission, nonconformity, needed adjustment in the Work or other deviation from the Project Requirements, including, without limitation, the failure of the Facility to comply with the Performance Criteria throughout the Warranty Period and deviations from the warranty set forth in **Section 13.1**.

“**Design**” (and derivative forms thereof) means all design, calculation, and engineering products or services and the conduct thereof, including all preliminary and detailed design of and associated with the Work (including the manner in which the Facility is integrated into the Units).

“**Design Documents**” has the meaning set forth in **Section 4.7**.

“**Differing Conditions**” means Physical Conditions that materially differ from all of the following: (i) conditions stated in **Exhibit S**, (ii) conditions stated in **Exhibit A**, (iii) conditions that are readily observable, and (iv) conditions that a prudent Contractor would reasonably infer from any of the foregoing.



“**Dispute**” means a dispute or other controversy arising out of or otherwise related to this Agreement.

“**Dock**” means the dock facilities described in **Exhibit A** and the related equipment situated adjacent and related thereto on the Effective Date.

“**Effective Date**” has the meaning set forth in the first paragraph of this Agreement.

“**Emergency Notification List**” means a list of Owner personnel, with associated contact information, that sets forth the individuals to be notified first in the event of an emergency involving health or safety, including environmental harm, or material damage to property, as such list is amended by Owner and provided to Contractor from time to time.

“**Environmental Action**” has the meaning set forth in **Section 19.1.1(ii)**.

“**Equipment**” means all of the equipment, materials, items, apparatus, structures, tools, machines, supplies or other goods, including Components, which are installed in the Facility or otherwise provided as part of the Work and are to be retained by Owner after Final Completion in accordance with this Agreement.

“**Equipment Accessibility**” means the Design of the Facility will include safe and ready access for maintenance, repairs, removal, and replacement of all Equipment consistent with the other Project Requirements. Such access shall include safe and ready ingress and egress and access for (i) personnel (along with all applicable equipment) to reach each item of Equipment and perform all reasonably expected maintenance and repairs on that Equipment over the life of the Facility and (ii) removing and replacing each item of Equipment, including any necessary overhead space for lifting equipment (e.g., cranes) and overhead structural steel support and load points for any necessary rigging including trolley beams and hoists. All items of Equipment are included in this definition, including those that are expected to be replaced more frequently such as light bulbs, etc.

“**Equipment Accessibility Plan**” means the portion of the Design of the Facility that sets forth in detail the Equipment Accessibility for each item of Equipment.

“**Excusable Event**” means an Excusable Event Basis as to which (a) such Excusable Event Basis, despite the exercise of reasonable diligence, could not be prevented, avoided or removed; (b) Contractor has taken all reasonable precautions, due care, and reasonable alternative measures in order to avoid the impact and to mitigate the consequences of such Excusable Event Basis on the Contractor’s ability to fulfill its obligations under this Agreement; (c) such Excusable Event Basis is not the result of the Culpable Conduct or other failure of Contractor (or a Subcontractor or other Person for whom either Contractor or a Subcontractor may be responsible) to perform any of its obligations under this Agreement; and (d) Contractor has strictly complied with the requirements of **Section 9.1**.

“**Excusable Event Basis**” means any of the following events to the extent that such event materially and adversely (a) results in an actual delay in the performance of the Work, which Contractor demonstrates extends the critical path of the Work; (b) increases Contractor’s cost of performing the Work; or (c) otherwise affects Contractor’s performance hereunder:

- (i) delays that Contractor demonstrates are caused by the failure of Owner to fulfill any of its obligations under this Agreement;
- (ii) events of Force Majeure; **provided, however**, with respect to the performance of the Work in connection with a Scheduled Tie-in Outage Period, no event of Force Majeure shall constitute an Excusable Event Basis unless the event occurs on the Trimble County Generating Station Site (including the Job Site) before or during the scheduled duration of the Scheduled Tie-in Outage Period and Contractor has satisfied the Marshaling Requirement, as more particularly described in **Section 6.3.3**;
- (iii) modifications to Owners security protocols pursuant to **Section 4.39**;
- (iv) a change by Owner in the date or duration of the Scheduled Tie-in Outage Period which is not the consequence of the request or fault of Contractor;
- (v) a suspension of the Work pursuant to **Sections 24.3.2** or **24.4** and a partial termination by Owner pursuant to **Section 24.1**;
- (vi) the discovery of any (a) Pre-Existing Hazardous Substance (other than a Contractor Hazardous Substance) that requires Environmental Action or (b) protected or endangered plant or animal species, artifacts, fossils or other items of historical, geological, archeological, or other value in accordance with **Section 4.34**;
- (vii) as provided in the penultimate sentence of **Section 4.36** regarding uncovering of Work; and
- (viii) any other events designated explicitly in this Agreement as being Excusable Event Bases, but only to the extent that such events meet the requirements of clause (a), (b), or (c) of this definition.

“**Excusable Event Notice**” has the meaning specified in **Section 9.1**.

“**Exhibits**” means all of the exhibits identified in the list of Exhibits following the “Table of Contents” to the Body of this Agreement.

“**Existing Facilities**” means all facilities, structures, installations, roadways, walkways, natural features, parking facilities, the Units, and auxiliary and support facilities thereto (but excluding any facilities built as part of the Work) now or hereafter located on the Trimble County Generating Station Site, including all existing facilities used in connection with the generation of electricity; the transportation, handling or storage of fuel; or the transmission of electricity.

“**Existing Facility Requirements**” has the meaning set forth in **Section 4.20**.

“**Extra Test**” has the meaning set forth in **Exhibit G**.

“**Facility**” means the Trimble County Generating Station CCR Treatment Project.

“**Final Completion**” will be determined on a Subproject by Subproject basis and will have been achieved when all of the following have occurred with respect to that Subproject: (i) Commercial Operation has been achieved; (ii) all items identified on the Punch List have been completed; (iii) all As-Built Drawings, Information, Design Documents, Operating and Maintenance Manuals, submittals and other documents required to be delivered to Owner hereunder have been so delivered; (iv) all liquidated damages for which Contractor is liable pursuant to **Exhibit L** and other amounts owed by Contractor to Owner under this Agreement, if any, have been paid to Owner; (v) all obligations of Contractor expressly required to have been performed prior to Final Completion will have been properly discharged; (vi) all Work has been completed other than Work (and other obligations) that require future performance (e.g., warranty Work, achievement of Guaranteed Availability, and indemnification); and (vii) Owner has issued the Certificate of Final Completion.

“**Financing**” means any form of construction, interim, long-term debt, lease, tax-exempt, recourse, non-recourse, equity or other form of funding, or refinancing that any Individual Owner or an Affiliate of any Individual Owner obtains, utilizes or attempts to obtain or utilize in connection with such Owner’s obligations hereunder.

“**Financing Parties**” means any Person that provides Financing or credit support for Financing, and/or any trustee(s) acting in connection therewith, and their respective successors and assigns.

“**Fly Ash Subproject**” means that portion of the Facility designated in **Exhibit A** as the Fly Ash Subproject.

“**FNTP**” has the meaning specified in **Section 25.25**.

“**Force Majeure**” means any condition, event, or circumstance to the extent such condition, event, or circumstance is not within the reasonable control of the Party affected, including war, rebellion, civil strife, insurrection, public disorder, Climatic Condition, earthquake, quarantine, act of terrorism, industry-wide or national strike, and Change in Law. Notwithstanding the foregoing, Force Majeure shall not include the following events, conditions or circumstances:

- (i) late delivery of Equipment, Consumables, or Construction Aids required for the Work however caused, including by congestion at a Subcontractor’s plant or elsewhere, oversold market conditions, inefficiencies, transportation delays or other similar circumstances (except to the extent a transportation delay is caused by the occurrence of an independent condition, event or circumstance described in and meeting the conditions of this definition);
- (ii) shortages of supervisors, labor, Equipment, Consumables, or Construction Aids;
- (iii) late performance as a consequence of any violation of Applicable Law or decisions of a Governmental Authority related to the conduct of Contractor’s or any Subcontractor’s business, including insolvency or any delay related to the economic, commercial or labor circumstances of Contractor, any Subcontractor or other business conducted by Contractor or any Subcontractor;

- (iv) breakdown, loss, or damage to or theft of machinery, Equipment, Consumables, or Construction Aids except where such breakdown, loss, or damage is directly due to the occurrence of an independent condition, event, or circumstance described in and meeting the conditions of this definition;
- (v) failure of a Party to pay amounts due and owing under this Agreement;
- (vi) strikes or other labor disturbances affecting Contractor or any of Subcontractors, except as expressly set forth in the examples described in the first full paragraph of this definition;
- (vii) increased costs of the Work, general economic or industry conditions; or
- (viii) weather conditions other than Climatic Conditions.

“Governmental Authority” means any federal, state, county, regional, city, parish or local government body, agency, authority, branch, department, arbitrator, court or any subdivision, instrumentality or agency thereof, having, or claiming, a regulatory interest in, or jurisdiction over, the Work (or any portion thereof), the Facility, the Units, the Trimble County Generating Station Site (or any portion of the foregoing), this Agreement or one or more of the Parties in their respective capacities under this Agreement.

“Guaranteed Availability” has the meaning set forth in **Exhibit G**.

“Guaranteed Commercial Operation Date” means the date for Guaranteed Commercial Operation for each Subproject as set forth in **Exhibit D** (such date may be adjusted only in accordance with **Articles 9 and 10** of this Agreement).

“Guaranteed Final Completion Date” means the date for Guaranteed Final Completion for each Subproject as set forth in **Exhibit D** (such date may be adjusted only in accordance with **Articles 9 and 10** of this Agreement).

“Guaranteed Substantial Completion Date” means the date for Guaranteed Substantial Completion for each Subproject as set forth in **Exhibit D** (such dates may be adjusted only in accordance with **Articles 9 and 10** of this Agreement).

“Guarantor” means Amec Foster Wheeler plc.

“Gypsum Subproject” means that portion of the Facility designated in **Exhibit A** as the Gypsum Subproject.

“Hazardous Substance” means: (i) any chemicals, materials, substances, or wastes which are now or hereafter defined as or included in the definition of “hazardous substance,” “hazardous material,” “hazardous waste,” “solid waste,” “toxic substance,” “extremely hazardous substance,” “pollutant,” “contaminant,” or words of similar import under any Applicable Law; (ii) any petroleum, petroleum products (including crude oil or any fraction thereof), natural gas, natural gas liquids, liquefied natural gas, or synthetic gas useable for fuel (or mixtures of natural gas and such synthetic gas), or oil and gas exploration or production waste, polychlorinated biphenyls,

asbestos or asbestos-containing materials, mercury, urea formaldehyde insulation, radioactive materials, and lead-based paints, or any other substance that has been contaminated, polluted or made toxic; and (iii) any other chemical, material, substances, waste, or mixture thereof which is prohibited, limited, or regulated pursuant to, or that could reasonably be expected to give rise to liability under, any Applicable Law.

“Hazardous Substances Management Plan” has the meaning set forth in **Section 4.20(vii)**.

“Hold Point” means an inspection point with respect to which Contractor or Subcontractors may not proceed further with respect to the Work unless and until Owner has either (i) inspected the applicable Work and authorized Contractor (including Subcontractors) to proceed, or (ii) waived such inspection in writing. Hold Points include those points designated in **Exhibit X**, and those designated by Owner from time to time by formal notice to Contractor.

“Hour” means a sixty (60) minute period commencing at the top of each clock hour.

“Indemnified Parties” has the meaning set forth in **Section 20.3.1**.

“Indemnifying Party” has the meaning set forth in **Section 20.3.1**.

“Individual Owner” means LG&E, KU, IMEA, and IMPA, individually.

“Information” means all drawings; documents; manuals; training materials; Computer Programs; operating, maintenance, and other guidelines and procedures; and Design, Design Documents and other data, trade secrets, and information used or supplied by Contractor, whether directly itself or indirectly through Subcontractors, whether conveyed in paper or electronic media or format, in performance of this Agreement which would be reasonably useful or necessary in Owner’s operation, maintenance, repair, training, modification, or use of the Facility.

“Insolvency Event” means, with respect to the Person: (i) the Person’s (a) failure to generally pay its debts as they become due, (b) admission in writing of its inability to pay its debts as they become due or (c) making a general assignment for the benefit of creditors; (ii) any proceeding being instituted by or against the Person seeking: (a) to adjudicate it as bankrupt or insolvent, (b) liquidation, winding up, reorganization, arrangement, adjustment, protection, relief or composition of it or its debts under any Applicable Law relating to bankruptcy, insolvency, reorganization or relief of debtors or (c) the entry of an order for relief or the appointment of a receiver, trustee, custodian or other similar official for it or for any substantial part of its property and, in the case of any such proceeding instituted against the Person, either such proceeding remains undismissed for a period of thirty (30) Days or any of the actions sought in such proceeding occur; or (iii) the Person’s taking any action to authorize any of the actions set forth above in this definition.

“Intellectual Property” means all Patent Rights, patent applications, copyrights, trade secrets and all other intellectual property rights.

“Job Site” means that portion of the Trimble County Generating Station Site on which the Work will be performed and the Facility will be constructed, including areas for parking, storage,

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laydown, and administrative facilities, as more particularly described in **Exhibit A** and **Exhibit S** hereto.

“**LC**” means a union or non-union local contractor (i.e., a business enterprise) with primary operations within the Commonwealth of Kentucky or one of the Louisville Kentucky, Evansville Indiana, or Cincinnati Ohio Metropolitan Statistical Areas as defined by the United States Census Bureau.

“**LD Criteria**” has the meaning set forth in **Section 7.1**.

“**Liabilities**” means any and all judgments, liabilities, losses, costs, expenses, damages, fines or penalties, court costs, reasonable attorneys’ fees and costs, and pre- and post-judgment interest.

“**Lien Indemnites**” has the meaning set forth in **Section 20.4**.

“**Liens**” has the meaning specified in **Section 20.4**.

“**Local Hires**” means workers hired as a part of Contractor’s and Subcontractors’ direct craft work force with respect to the Work whose primary residences are located within: (i) Trimble County, Kentucky, (ii) the Commonwealth of Kentucky, or (iii) the Standard Metropolitan Statistical Area (as defined by the United States Census Bureau) for each of Louisville, Kentucky; Evansville, Indiana; or Cincinnati, Ohio.

“**Local Spend**” means expenditures with respect to this Agreement by Contractor and Subcontractors with LCs.

“**Major Contract Milestones**” means the Scheduled Tie-in Outage Periods, Scheduled Mechanical Completion Dates, the Guaranteed Substantial Completion Dates, the Guaranteed Commercial Operation Dates, and the Guaranteed Final Completion Dates.

“**Major Subcontractor**” means a Subcontractor providing labor, materials and/or Equipment in relation to the Work under this Agreement which has a value of one hundred thousand dollars (\$100,000) or more.

“**Marshaling Requirement**” has the meaning set forth in **Section 6.3.3**.

“**MBE**” means a minority business enterprise certified as being at least 51% owned by a minority individual or group (or in case of any publicly owned business, at least 51% of the stock of which is owned by a minority individual or group) whose management and daily business operations are controlled by such individual or members of such group. Minority means African Americans, Hispanic American, Asian Pacific Americans, Native American, Subcontinent Asian American, and other groups approved by Owner.

“**MBE Spend**” means expenditures with respect to this Agreement by Contractor and Subcontractors with MBEs.



“**Mechanical Completion**” will be determined on a Subproject by Subproject basis and will have been achieved when all of the following have occurred with respect to that Subproject: (i) all Equipment has been furnished and installed in accordance with **Exhibit A** and manufacturers’ requirements (and in a manner that does not void any Subcontractor warranty) and the terms of this Agreement and, as appropriate, checked for alignment, lubrication, rotation, and hydrostatic and pneumatic pressure integrity; (ii) Turnover Acknowledgement of all Systems has been achieved; (iii) all Systems have been installed, cleaned and statically tested and cold commissioning has been completed; (iv) all initial tests have been completed, all instruments have been calibrated, the appropriate Systems have been flushed and cleaned out as necessary, and all motor rotation checks are complete; (v) all Tie-ins have occurred; (vi) the Units and Yard Systems as modified by the Subproject are capable of being safely commissioned, tested and operated in the ordinary course of business; (vii) the Subproject has been properly integrated into individual Units (physically and electronically); (viii) the Subproject is ready to commence commissioning, testing and integrated operations without the use of temporary equipment or installations; (ix) an initial Punch List has been established and mutually agreed upon by Owner and Contractor; (x) the Performance Guarantee Test Procedures have been submitted to and accepted by Owner; (xi) the training required by **Section 4.9** has been completed; and (xii) Owner has executed the Certificate of Mechanical Completion.

“**Milestone Payment Schedule**” means the schedule of payment milestones and values as set forth in **Exhibit C**, as it may be adjusted in accordance with this Agreement.

“**Minimum Required Performance**” means with respect to a Subproject, that such Subproject is capable of transporting and treating all of the CCR applicable to such Subproject in accordance with the Project Requirements except that the throughput of the Subproject may be lower than required by the Project Requirements but only to the extent that such lower throughput is sufficient (i) to transport and treat all of the CCR generated by the Units without causing additional costs to Owner and (ii) to not cause an outage or derate of a Unit.

“**Modification**” means: (i) a written amendment to this Agreement signed by all Parties; (ii) a Change Order; or (iii) an Adjustment on account of an Excusable Event pursuant to **Section 9.1**.

“**Month**” means a calendar month.

“**MSDSs**” has the meaning set forth in **Section 19.1.3**.

“**NERC**” means the North American Electric Reliability Corporation, a reliability organization responsible for the oversight of the regional reliability organizations established to ensure the reliability and stability of the regions.

“**NERC Requirements**” has the meaning set forth in **Section 4.39**.

“**NERC Standards**” has the meaning set forth in **Section 4.39**.

“**Notice**” has the meaning set forth in **Section 25.5**.



“**Operating and Maintenance Manuals**” means the operating and maintenance manuals referred to in **Section 4.14**.

“**Owner**” has the meaning set forth in the preamble of this Agreement.

“**Owner Default**” has the meaning set forth in **Section 24.3.1**.

“**Owner Engineer**” means a third party engineering firm selected by Owner.

“**Owner Indemnitees**” has the meaning set forth in **Section 20.1**.

“**Owner Permits**” means the Permits designated in **Exhibit P** as Owner’s Permits.

“**Owner Representative**” has the meaning set forth in **Section 5.1**.

“**Owner Review Period**” has the meaning set forth in **Section 6.2.2**.

“**Parent Guarantee**” means the guarantee to be duly executed and delivered by Guarantor, in substantially the form set forth in **Exhibit F-8**.

“**Party**” or “**Parties**” means Owner, Contractor or both of them, as the context or the usage of such term may require.

“**Patent Rights**” mean any and all forms of patents issued or granted anywhere in the world arising from or related to the Work, all conditionals, renewals, extensions and continuations in part thereof, and all applications for such patents which have not been abandoned or expired.

“**Performance Criteria**” means the applicable guaranteed value for each Performance Guarantee as set forth in Appendix A of **Exhibit G**.

“**Performance Guarantees**” has the meaning set forth in **Exhibit G**.

“**Performance Guarantee Test Procedures**” has the meaning set forth in **Exhibit G**.

“**Performance Guarantee Tests**” has the meaning set forth in **Exhibit G**.

“**Performance Securities**” means the Phase One Performance Security, the Phase Two Performance Security, and the Phase Three Performance Security.

“**Permits**” means any waiver, exemption, variance, franchise, permit, authorization, approval, identification number, inspection, certification, determination, license, clearance or similar order, filing, registration, application of, from or to any Governmental Authority, including those set forth in **Exhibit P**.

“**Person**” means any individual, company, corporation, firm, joint venture, partnership, association, limited liability entity, organization, trust, Governmental Authority or similar entity.

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“**Phase One Performance Security**” means an Acceptable Letter of Credit to be delivered to Owner in the amount of [REDACTED] (as such Contract Price may be adjusted from time to time), and any replacement letters of credit therefore.

“**Phase Two Performance Security**” means an Acceptable Letter of Credit to be delivered to Owner in the amount of [REDACTED] (as such Contract Price may be adjusted from time to time), and any replacement letters of credit therefore.

“**Phase Three Performance Security**” means an Acceptable Letter of Credit to be delivered to Owner in the amount of [REDACTED] (as such Contract Price may be adjusted from time to time), and any replacement letters of credit therefore.

“**Physical Conditions**” means geotechnical, topographical, geological, seismic, hydrographical, hydrological, or other physical conditions related to the Job Site, the Trimble County Generating Station Site, and/or the proximate area, including conditions relating to foundation and piling Design and construction, Job Site preparation, Design, construction or any other portion of the Work.

“**Pre-Existing Hazardous Substance**” means a Hazardous Substance existing on the Job Site as of the Effective Date, which Hazardous Substance is of a nature or exists in an amount that requires special handling, disposal or remediation under Applicable Law. Hazardous Substances that are used or useful in the operation of the Existing Facilities that are labeled and in appropriate containers are not considered Pre-Existing Hazardous Substances under this Agreement.

“**Prime Rate**” means the per annum (365 or 366 Days, as appropriate) prime rate as published from time-to-time in the “Money Rates” table of *The Wall Street Journal*; **provided, however**, if more than one such prime rate is published, the average shall be used for purposes of this Agreement, unless an equivalent bank rate is agreed to by the Parties.

“**Professional Standards**” means those standards and practices used by, and the degree of skill and judgment exercised by, recognized United States national engineering and/or construction firms when performing first class quality services in connection with performing work related to operating coal-fired generation facilities similar to the Trimble County Generating Station.

“**Project Schedule**” means the total integrated resource-loaded fully logic tied, critical path method project schedule showing engineering, procurement, and construction, expressed in Primavera® format, including Major Contract Milestones as such Project Schedule may be adjusted pursuant to this Agreement; **provided, however**, no adjustment shall be made to the Major Contract Milestones other than in accordance with **Articles 9 and 10** of this Agreement..

“**Project Requirements**” means with respect to the Work, including the Facility or any portion thereof: (i) Applicable Law; (ii) Codes; (iii) the provisions of this Agreement; (iv) the Major Contract Milestones; (v) the Performance Guarantees; (vi) the requirements and warranties of Subcontractors, including Equipment Subcontractors; (vii) the requirements of insurers providing insurance pursuant to **Article 21**; (viii) the Operating and Maintenance Manuals; (ix) Professional Standards; (x) Prudent Utility Practices; and (xi) Equipment Accessibility.

“Prudent Utility Practices” means the practices, methods, materials, supplies, equipment, and standards of safety, performance, and service that are commonly applied in the electric utility industry in the United States to operate and maintain generating facilities similar to the Units, including the use of, and adherence to, equipment, practices and methods, applicable industry codes, standards, and regulations that in the exercise of reasonable judgment and in light of the facts and circumstances known at the time the decision was made would be reasonably expected (i) to accomplish the desired result while protecting the Work, the Facility, the Existing Facilities, the Existing Facility Requirements, the interconnection facilities, individuals, and the environment from damage, loss or injury and (ii) to protect against damage, loss or injury occurring to the transmission grid or the facilities of any utility to which the Facility is directly or indirectly electrically connected. Prudent Utility Practices are not intended to be limited to the optimum practice or method to the exclusion of all others, but rather to be a spectrum of possible, but reasonable practices and methods, having due regard for vendor warranty requirements, Applicable Law, and the operating and maintenance procedures of co-located generation and associated facilities.

“Punch List” or **“Punch List Items”** means and refers to a comprehensive list initially prepared prior to certification of Mechanical Completion of a Subproject which may be supplemented thereafter to identify those minor Defects that require repair, completion, correction or re-execution by Contractor, but which in their current state (individually and collectively) do not limit or otherwise interfere with the occupancy, use, operation in automatic mode, safety, legality or reliability of the Subproject or any portion thereof or the associated Units in the normal course of business.

“Records” has the meaning set forth in **Section 25.11**.

“Required Contract Security”: means at any time the sum of the amounts set forth in the definitions for the Phase One Performance Security, the Phase Two Performance Security, and the Phase Three Performance Security, minus the amounts of any Performance Securities released and returned to Contractor pursuant to **Section 8.13**.

“Sales Taxes” has the meaning set forth in **Section 8.2.1**.

“Scheduled Mechanical Completion Date” means the date for each Subproject as set forth in **Exhibit D** as the Scheduled Mechanical Completion Date (such date may be adjusted only in accordance with **Articles 9 and 10** of this Agreement).

“Scheduled Tie-in Outage Period” means, for each Unit, the scheduled outage period, during which time, but prior to the Contractor Outage End Time, Contractor must complete Tie-in (the time and date for such outage and the period during which Contractor may perform Tie-in Work is set forth in **Exhibit D**) as such time and date may be adjusted pursuant to this Agreement.

“Senior Officer” has the meaning set forth in **Section 23.1**.

“Special Tools” means tools that are described in the Technical Specification or are specifically designed for the installation, checking, inspection, operation, repair, or maintenance of Equipment.

“**Specialty Supplier**” means any Subcontractor that provides Equipment for which either (i) there are not at least four competitive alternative suppliers of replacement parts for such Equipment (or components thereof) or (ii) there are not at least four competitive vendors that provide maintenance and repair services with respect to all of the Equipment provided by that Subcontractor.

“**Subcontract**” means a contract, agreement, purchase order, lease or rental agreement or other arrangement to perform a portion of the Work, including the supply of services, Equipment, Consumables, or Construction Aids in connection with the Work; **provided, however**, if Contractor enters into a Subcontract with an Affiliate for performance of Work, such Work will be deemed to be Work directly performed by Contractor hereunder without regard to such Subcontract

“**Subcontractor**” means and refers to a Person (at any tier other than Contractor) which has a contract, agreement or other arrangement to perform a portion of the Work, including the supply of services, Equipment, Consumables, or Construction Aids in connection with the Work.

“**Subproject**” means one of the following: the Fly Ash Subproject, the Bottom Ash Subproject, the Gypsum Subproject, and the Transport Subproject.

“**Supplier Diversity Policy**” has the meaning set forth in **Section 25.23**.

“**Substantial Completion**” will be determined on a Subproject by Subproject basis and will have been achieved when all of requirements of Commercial Operation for that Subproject have occurred except as set forth below with respect to the following clauses of the definition of Commercial Operation:

- (iii) Not applicable
- (iv) Not applicable
- (v) Not applicable
- (viii) Applies only to liquidated damages incurred pursuant to **Article 7** through the date of Substantial Completion
- (xi) Applies except with respect to changes in the Work made after Substantial Completion
- (xii) Applies only with respect to making the drawings current as of the Substantial Completion Date (either marked showing as-built conditions or supplemented with an As-Built Drawing)
- (xv) Applies but applicable Certificate is the Certificate of Substantial Completion.

“**Substantial Completion Date**” means with respect to a Subproject, the date on which Substantial Completion is achieved for that Subproject.

“**System**” means a system or subsystem of the Facility set forth in the plan established pursuant to **Section 6.2**, all of which will be subject to the turnover requirements of **Article 6**; taken together, all Systems compose the entire Facility.

“**System Turnover Package**” means for each System, the collection of documents, drawings, specifications, manuals and other enumerated items of Information including diagnostic equipment tests that comprise a complete description of the System and its operating requirements in form and substance reasonably acceptable to Owner and meeting the requirements of the final turnover plan established pursuant to **Section 6.2**.

“**Technical Specification**” means and refers to **Exhibit A** attached hereto, and documents specified therein.

“**Terminal Points**” means the specific points of connection including the interfaces and terminal points between the Facility and the Existing Facilities specified in **Exhibit T**.

“**Third Party**” means any Person that is neither a Party nor an Affiliate of a Party to this Agreement.

“**Tie-in**” shall mean when the applicable Subproject (including the gas path) is Connected as applicable to the Terminal Points of the applicable Unit.

“**Tie-in Date**” means for each Tie-in, the date on which that Tie-in occurs.

“**Transport Preliminary Milestone**” means Work related to the Transport Subproject in any Month as outlined in Exhibit C under “Preliminary Transport Subproject Milestones;” provided, that upon the giving of an FNTP, all Transport Preliminary Milestones shall become ordinary milestones

“**Transport Preliminary Milestone Month**” means the Month for a Transport Preliminary Milestone as set forth in the Milestone Payment Schedule.

“**Transport Subproject**” means that portion of the Facility designated in **Exhibit A** as the Transport Subproject.

“**Trimble County Generating Station Site**” means the site, as more particularly described in **Exhibit S**.

“**Turnover Acknowledgment**” has the meaning set forth in **Section 6.2.2**.

“**Unit**” means one of the two existing coal-fired units operating on the Trimble County Generating Station Site that are commonly identified as Unit 1 and Unit 2. Unless the context indicates otherwise, the term “Units” refers to both Units.

“**Unit Outage Hour**” has the meaning set forth in **Exhibit L**.

“**Warranty Period**” means the period described in **Section 13.2**, as it may be extended in accordance with this Agreement.

“**WBE**” means a women business enterprise certified as being at least 51% owned by a one or more women (or in case of any publicly owned business, at least 51% of the stock of which is owned by one or more women) whose management and daily business operations are controlled by one or more of such women.

“**WBE Spend**” means expenditures with respect to this Agreement by Contractor and Subcontractors with WBEs.

“**Work**” means all of the work, services, Equipment, Consumables, and Construction Aids to be performed, provided, or installed by Contractor in accordance with this Agreement, including all Job Site preparation, Design, reconditioning, procurement, transportation, expediting, storage, construction, training, start-up, commissioning, testing, clean-up and waste disposal, and other services or items that are necessary or appropriate to complete the Facility, effect Tie-in and Connect each Subproject, achieve Commercial Operation of each Subproject, and Final Completion of each Subproject, and fulfill Contractor’s obligations during the Warranty Period of each Subproject in accordance with this Agreement. Work specifically includes any options exercised by Owner in accordance with **Exhibit O**. Upon such exercise by Owner, this Agreement will be modified as provided by the applicable terms set forth in **Exhibit O**.

“**Yard System**” means a portion of the Existing Facilities, other than all of Unit 1 or all of Unit 2, that must be taken out of service in order to perform a Tie-in.

1.2 Contract Interpretation. In this Agreement, unless the context otherwise requires:

- (i) the singular includes the plural and vice versa (specifically, the terms “Owner” and “Owners” each mean all of the Individual Owners, collectively, subject to the provisions of Section 25.14);
- (ii) reference to any Person includes such Person’s successors and assigns, to the extent that such successors and assigns are permitted by this Agreement, and reference to a Person in a particular capacity excludes such Person in any other capacity;
- (iii) reference to any agreement (including this Agreement), document, insurance policy or instrument means such agreement, document or instrument as amended or modified and in effect from time to time in accordance with the terms thereof;
- (iv) any accounting term used and not otherwise defined in the Agreement has the meaning assigned to such term in accordance with generally accepted accounting principles consistently applied;
- (v) “including” (and “include”) means: (a) including without limiting the generality of any description preceding such term and (b) with respect to any description following such term, means “including, without limitation” or “including, but not limited to”;

- (vi) reference to Applicable Law means Applicable Law as amended, modified, codified or reenacted, in whole or in part, and in effect from time to time;
- (vii) when applied to Equipment or Systems, “furnish” “provide” or words of similar import means to secure, pay for, deliver to the Job Site (or other portions of the Trimble County Generating Station Site, as appropriate), unload, inspect and uncrate, store per manufacturer’s recommendations and any other services or activities appropriate to that portion of the Work;
- (viii) when applied to Equipment or Systems, “install” or “installation” or words of similar import mean to assemble, place in position, incorporate, adjust, clean, make fit for use and any other services or activities appropriate to that portion of the Work;
- (ix) unless the context specifically requires otherwise, the terms “approval,” “consent,” “accept,” “acceptance,” “authorization,” and terms of similar import shall be deemed to be followed by the phrase “which shall not be unreasonably withheld, unreasonably conditioned or unreasonably delayed”;
- (x) the words “shall” and “will” have equal force and effect;
- (xi) any reference to “Contractor” is deemed to be a reference to Contractor and Subcontractors in respect of any Work or other obligations hereunder that Contractor has chosen to have performed by a Subcontractor
- (xii) the words “herein,” “hereof,” or “hereunder” or similar terms refer to this Agreement as a whole and not to any specific section or article;
- (xiii) the table of contents and article, section and exhibit titles and similar headings are inserted for convenience only and are not to be used for the purposes of construing or interpreting this Agreement;
- (xiv) the Work is intended to be a term that encompasses all of the necessary performance obligations of Contractor. Any listing of types of work such as “construct,” “erect,” “check” or “align” is not meant to be exclusive in the context of this Agreement or exclude similar or other services or activities appropriate to that portion of the Work;
- (xv) words and abbreviations not defined in this Agreement which have well-known technical or design, engineering or construction industry meanings are used in this Agreement in accordance with such recognized meanings;
- (xvi) all documentation to be supplied under this Agreement shall be provided in the English language;
- (xvii) all dimensions must be specified in the United States customary system;

- (xviii) this Agreement and all terms hereunder (including terms related to the reasonableness of the Owner's actions) shall be construed taking into consideration the Existing Facility Requirements;
- (xix) if a payment obligation to be performed under this Agreement falls due on a Day that is not a Business Day, the payment obligation will instead be due on the next Business Day; and
- (xx) payments under this Agreement which are due must be made exclusively in United States dollars.

ARTICLE 2

EFFECTIVENESS

2.1 Effectiveness.

2.1.1 Effectiveness. This Agreement shall be effective and the Parties shall be bound by it upon its execution and delivery by all Parties. Contractor shall commence the Work immediately upon the effectiveness of this Agreement.

2.2 Contractor Commitments and Confirmations.

- (i) Contractor hereby confirms that as of the execution of this Agreement there exist no grounds on which a claim by Contractor pursuant to **Articles 9 or 10** may be based;
- (ii) On or before 30 days after the Effective Date, Contractor shall deliver to Owner the Parent Guarantee; and on or before 14 days after the Effective Date, Contractor shall deliver to Owner the Project Schedule in no less than a Primavera® Level 2 format without resource loading;
- (iii) On or before 7 days after the Effective Date, Contractor shall have delivered to Owner certificates of non-project specific insurance policies applicable to the period commencing on the Effective Date evidencing coverages and terms as required by **Exhibit I** (and shall thereafter make copies of such policies available for inspection by Owner and such policies may be redacted to not show the amount by which the limits of such insurance exceeds that required by Exhibit I);
- (iv) At least three (3) weeks prior to on-site mobilization, Contractor shall provide to Owner copies of project specific insurance policies and certificates required to be obtained by Contractor in accordance with **Exhibit I**;
- (v) Prior to mobilization to the Job Site, Contractor shall confirm through receipt of notice from Owner that Owner has received all Owner Permits, set forth in **Exhibit P**, as are necessary to commence construction, on terms

and conditions acceptable to Owner, which permits, approvals or licenses have become final and are not subject to rehearing or appeal;

- (vi) Prior to on-site mobilization, Contractor shall deliver the Project Schedule in no less than a Level 3 Primavera® P6 format, with a fully logic-tied schedule developed and resource-loaded;
- (vii) Prior to on-site mobilization, Contractor shall provide Owner with all necessary information to allow Owner to have submitted all necessary filings to Governmental Authorities that are required prior to the commencement of construction; and
- (viii) Contractor acknowledges that separate contractors of Owner will have access to the Job Site for work, including work described in **Exhibit A** or **Exhibit S** and Contractor shall cooperate and coordinate with Owner and such separate contractors such that Contractor and Owner's separate contractors can perform their respective scopes of work without delay.

ARTICLE 3

GENERAL PROVISIONS

3.1 Intent of Contract Documents. It is the intent of the Parties that this Agreement be a lump-sum, turnkey contract with a fixed Contract Price and fixed Major Contract Milestones which, in each case, will not be increased or lengthened (or decreased or shortened) whether under contract or tort law (including with respect to any delay, hindrance, interference, and disruption of the Work), except in accordance with **Articles 9 and 10**.

3.2 Independent Contractor. Contractor will perform and execute the provisions of this Agreement as an independent contractor to Owner. Contractor is not and may not act as an agent of Owner for any purpose or reason whatsoever. References to Contractor in this Agreement in respect of Work are also to be understood as references to any Subcontractor that is performing such Work.

3.3 Subcontracting. Subject to **Section 3.4**, Contractor may have portions of the Work performed by Subcontractors, including entities related to or affiliated with Contractor; **provided, however**, that (i) Contractor may not Subcontract all or substantially all of the Work and (ii) no Work may be performed by any Subcontractor on or near the Trimble County Generating Station Site if that Subcontractor does not meet the safety qualifications set forth in Exhibit H (unless Contractor first obtains Owner's consent, which may be withheld at Owner's sole discretion). No contractual relationship will exist between Owner and any Subcontractor with respect to the Work to be performed hereunder, except pursuant to **Sections 3.5, 3.6 and 13.4**. Notwithstanding whether or not any provision of this Agreement specifically refers to Contractor's Subcontractors or their employees or other invitees, Contractor will be fully responsible for all acts, omissions, failures or faults of any such Persons as fully as if they were the acts, omissions, failures or faults of Contractor and Contractor shall require Subcontractors to provide or perform their portion of the Work in compliance with Contractor's obligations

under this Agreement. If any Subcontractor fails to perform any portion of the Work as such Work is required to be performed in accordance with this Agreement, Contractor is responsible therefor and hereby binds itself to promptly and diligently correct such failure in accordance with this Agreement, at no cost or expense to Owner. The exercise of the right to subcontract will not in any way increase the cost, expense, or liability of Owner hereunder. Contractor shall require any Subcontractor to perform its portion of the Work: (i) under Contractor's supervision and (ii) in accordance with the requirements of this Agreement. Owner may communicate with Contractor's Subcontractors directly, **provided** Contractor is informed of all such communications. However, Contractor shall be solely responsible for providing all information regarding the Work and direction to Subcontractors necessary for Subcontractors to perform the Work. Contractor shall bind all Major Subcontractors to terms that protect Owner's rights and benefits hereunder and are otherwise not in conflict with the provisions of this Agreement applicable to the subcontracted Work (including the provision of Equipment).

3.4 Specified Subcontractors. For those items of Work or Equipment specified in **Exhibit E**, Contractor will only use the services of, or procure Equipment from, those Persons listed under the applicable headings specified in **Exhibit E**. Contractor will be responsible for the negotiation of the terms and conditions of any Subcontracts entered into with such identified Persons (including cost, performance guarantees and equipment warranties), and it will enter into written Subcontracts in its own name directly with such Persons, it being the intent of the Parties that such Persons will be Subcontractors of Contractor and not of Owner. Operability, maintainability, reliability, quality, and compatibility with equipment and consumables utilized in the Existing Facilities must be material selection factors in Contractor's procurement decisions. Contractor shall undertake to include MBEs, WBEs, DBEs, and LCs to the maximum practicable extent on bid lists for portions of the Work. Contractor agrees that before submitting specifications for bids to Major Subcontractors it will give Owner a reasonable opportunity to comment on such specifications and proposed bid list and Owner agrees that if it wishes to comment, Owner will submit such comments within the time period specified for that item in **Exhibit X** and if not so specified, within fifteen (15) Business Days after delivery of the specifications to Owner. Contractor will cooperate and work in good faith with Owner to accommodate Owner's comments. Notwithstanding Owner's right to review and comment in accordance with this **Section 3.4**, no such review or comment will relieve Contractor or otherwise serve as a defense to Contractor's full performance of its obligations hereunder.

3.5 Certain Provisions in Subcontracts. All Subcontracts with a Major Subcontractor must contain provisions, which Contractor may not waive, release, modify, or impair: (i) giving Contractor an unrestricted right, without the consent of the Subcontractor, to assign (and for the assignees to thereafter reassign) the relevant Subcontract and/or any or all benefits, interests, rights and causes of action arising under it to Owner and/or its designees (and such assignment right will be assigned as part of such assignment); (ii) complying with the provisions of **Section 20.4**; (iii) authorizing either Owner or Contractor to enforce guarantees and warranties; (iv) requiring Subcontractors that will have a presence on the Trimble County Generating Station Site to comply with the plan provided for in **Section 14.1** of this Agreement; (v) indemnifying Owner on substantially the terms and conditions set forth in **Section 20.1**; (vi) incorporating **Section 16.3**; (vii) granting a warranty with respect to the portion of Work performed under that Subcontract that, at a minimum, meets the same terms, conditions, and duration as set forth in **Article 13** of this Agreement; (viii) causing Subcontractors of Equipment,

upon the request of Owner, to segregate such Equipment at their fabrication facilities and identify Owner's property as such in a manner acceptable to Owner; and (ix) with respect to the Components set forth in **Exhibit AA**, provide warranties substantially on the same terms as in **Article 13** of this Agreement, but with the warranty period as set forth for that component in **Exhibit AA**. Contractor shall notify Owner when it enters into any Subcontract with a Major Subcontractor and shall promptly provide Owner with an electronic copy of such Subcontracts and all change orders and amendments thereto. Copies of other Subcontracts shall be available to Owner upon request. In no event will Contractor enter into a Subcontract with any Subcontractor that provides for a warranty that has a length or other term that is less than that Subcontractor's standard warranty for the applicable Equipment.

3.6 Assignment of Subcontracts. Contractor shall, if so requested by Owner after termination of Contractor pursuant to **Article 24** or the expiration of the applicable Warranty Period as it may be extended, assign: (i) any Subcontract then remaining (together with any retainage, letter of credit or other security provided by such Subcontractor) and/or (ii) the benefits of any remaining applicable Subcontractor warranty (as it may have been extended) to Owner or a designee of the Owner, which assignment must be binding on the Subcontractor and not require consent of the Subcontractor. Upon assignment, any such warranty must be in full force and effect in accordance with its terms.

3.7 Subcontracts. All Subcontracts shall provide that title will be transferred in the name of Owner in accordance with **Section 22.1**. Each Subcontract shall limit recourse exclusively to Contractor, except upon any assignment of such Subcontract pursuant to **Section 3.6**. Subcontracts shall allow for suspension of all or a portion of the Work to be performed thereunder and shall be terminable for convenience pursuant to a termination payment schedule.

3.8 Inclusion; Order of Precedence. The Body of this Agreement and the Exhibits hereto are to be considered complementary and what is required by one will be binding as if required by all. Contractor has included within the Contract Price the cost to complete the Work in its entirety and to fulfill its other obligations hereunder. In addition, the Work includes all that should be properly included and all that would be customarily included within the general scope and magnitude of the Work in order to achieve the Performance Guarantees in accordance with the Project Requirements. The failure to specifically list a requirement in one document, once such requirement is specifically listed in another, does not imply the inapplicability of such requirement and Contractor shall provide or perform, as appropriate, as part of this Agreement all Work or items required to conform to the Technical Specification, the other Exhibits and the standards herein contained. In the event of a conflict between the Body of this Agreement and the Exhibits, the Body of this Agreement governs. In the event of a conflict in an Exhibit or between or among Exhibits, the requirement most favorable to Owner will take precedence, except as may be otherwise determined by Owner. Each Modification will take precedence over that part of this Agreement (including, as applicable, any prior Modification) which it supersedes.

3.9 Owner's Agent. The Parties acknowledge that LG&E is the authorized agent of Owner for the purpose of administering this Agreement and managing the performance of Owner's rights and obligations under this Agreement. Contractor acknowledges that the acts



and omissions of LG&E are the responsibility of Owner and Contractor shall not have recourse under this Agreement against LG&E, in its capacity as Owner's agent hereunder. Contractor further acknowledges that (i) it will accept the acts and directions of LG&E as the acts and directions of Owner; (ii) it will render performance to LG&E, as agent for Owner; and (iii) only LG&E has the power and authority to direct the Contractor and/or enter into any Modification, in each case unless and until Contractor is notified otherwise in a writing signed by all Individual Owners.

ARTICLE 4

CONTRACTOR'S RESPONSIBILITIES

4.1 Performance of the Work. Contractor hereby covenants and agrees to continuously and diligently provide, perform, install, and complete the Work and its other obligations hereunder in accordance with Project Requirements and the Major Contract Milestones. Contractor further covenants and agrees to procure, provide and pay for all Equipment, Consumables (other than Consumables to be provided by Owner pursuant to **Section 5.3**), Construction Aids, and other items or services necessary for the proper execution and completion of the Work, whether temporary or permanent and whether or not incorporated or to be incorporated into the Work, including all site preparation, installation, construction services, Design, drafting and procurement, all administration, reporting, expediting, inspection, testing, training, scheduling, and coordination; all start-up, commissioning and testing services; all labor (skilled and unskilled); all insurance (as required by **Exhibit I**); Permits, licenses, and inspections (other than those required to be supplied by Owner under this Agreement); and all tools, machinery, storage, and transportation and all other facilities and services necessary to provide and complete the Facility in accordance with **Exhibit A** and this Agreement, it being understood that to the extent **Exhibit A** does not expressly delineate an aspect of the Work, the Parties intend that the Facility be designed, equipped, completed, and integrated into the Units consistent with Project Requirements. Contractor shall order, expedite, receive, furnish, handle, inspect (and, as appropriate, reject), store, maintain and install Equipment and Consumables in accordance with vendor/manufacture requirements and, in the absence thereof, in accordance with Project Requirements. Contractor will perform all managerial, supervisory, and administrative services that may be necessary to ensure the proper and timely completion of all activities which form a part of the Work. As such, Contractor agrees that Contractor shall be ultimately responsible for the proper and timely completion of the entirety of the Work in accordance with this Agreement, whether performed by Contractor or by any Subcontractor.

4.2 Sufficient Personnel. Contractor shall, at all times during the term of this Agreement, employ a sufficient number of qualified and competent supervisory personnel, craft persons, and other persons, so that the Work and the other obligations to be performed by Contractor hereunder are completed in an efficient, prompt, economical, and professional manner. Contractor shall be responsible for all overtime or other premium time Work. Without in any way limiting the foregoing, such personnel must include sufficient qualified buyers, inspectors, and expeditors necessary to provide Equipment, Construction Aids, and Consumables in a timely manner consistent with the Project Requirements. Whenever required by Applicable Law and Professional Standards, licensed (in the applicable jurisdiction) professional engineers will perform the Design services required to perform the Work. Other portions of the Work shall

be performed by properly licensed personnel as required by Applicable Law and Professional Standards. Contractor shall also provide all construction and technical services, supervision, and craft personnel as required for system adjustments during start-up, commissioning, and testing. Contractor shall provide for an Owner-approved Third Party certified testing company in accordance with the requirements set forth in **Exhibit G**. During start-up, testing or the operation of the Work until Commercial Operation, Contractor shall maintain qualified personnel on the Job Site twenty-four (24) Hours a Day to supervise Owner's operators regarding operation and maintenance of the Subproject. Design Documents must be stamped by a Kentucky Registered Professional Engineer as required by Applicable Law.

4.3 Labor Matters.

4.3.1 Labor Peace. Contractor shall be responsible for labor peace on the Job Site and other portions of the Trimble County Generating Station Site where Work is to be performed or which is used by Contractor and for maintaining good labor relations with local labor organizations. Contractor shall at all times exert its best efforts and judgment as an experienced contractor to adopt and implement policies and practices designed to avoid work stoppages, slowdowns, disputes, or strikes when reasonably possible and practical under the circumstances. Contractor shall advise Owner promptly, in writing, of any actual, anticipated, or threatened labor dispute that might affect the completion of the Work by Contractor (or by any Subcontractor) in accordance with the Major Contract Milestones.

4.3.2 Verification of Employment Eligibility. Contractor shall comply with the Immigration Reform and Control Act of 1986.

4.4 Discipline and Protection. Contractor shall enforce strict discipline and good order among Contractor's employees, Subcontractors' employees, and any other Persons carrying out portions of the Work on the Trimble County Generating Station Site and Contractor shall also provide for the protection and maintenance of the Work and of all Persons and property related thereto. Contractor shall at all times take all necessary precautions to prevent any unlawful or disorderly conduct by or amongst its employees and those employees of Subcontractors and for the preservation of peace and protection of individuals and property at, or in the vicinity of, the Trimble County Generating Station Site. Contractor shall not permit the employment of unfit individuals or individuals not skilled in tasks assigned to them. Contractor understands the importance of maintaining, and shall maintain, good relations with the community in which the Trimble County Generating Station Site is located and shall emphasize the importance of good community relations to its and Subcontractors' employees and other Persons under its supervision on the Job Site.

4.5 Supervision. Contractor shall supervise, coordinate, and direct the Work, using Contractor's best skill, judgment, and attention and in a manner consistent with Project Requirements. Contractor is responsible for the conduct of Persons under its supervision.

4.6 Contractor's Key Personnel. **Exhibit K** contains a list of Contractor's key personnel who will be responsible for supervising the performance of Contractor's obligations hereunder. Such list includes the designation of Contractor's principal representative (the

“**Contractor’s Representative**”), who will be Contractor’s authorized representative having the responsibility and authority to direct and manage the Work, administer this Agreement, serve as Contractor’s primary point of contact from and with Owner to receive and initiate all communications (other than Notices, which shall be made in accordance with **Section 25.5**) and be authorized to make decisions related to the Work and bind Contractor. Contractor recognizes that a good working relationship must exist between its key personnel and Owner. Owner has the right to request replacement of key personnel upon reasonable notice after having given Contractor a reasonable opportunity (not to exceed ten (10) Days) to rectify the situation leading to such request. Upon the expiration of such period, if Owner remains unsatisfied, Contractor shall promptly effect such replacement. Any replacement of key personnel is subject to the prior written approval of Owner. Contractor’s Representative shall act as Contractor’s liaison with Owner.

4.7 Design and Engineering.

4.7.1 Design Requirements. As engineer of record, Contractor has full Design responsibility for the performance of the Work (except with respect to the haul road and bridge portion of the Transport Subproject to the extent that the Design is set forth therefor in **Exhibit A**). Contractor shall engage all supervisors, engineers, designers, draftsmen, Subcontractors, and others necessary for the Design of the Work (including modification of the drawings of Existing Facilities as appropriate and including Equipment Accessibility) and the preparation of all drawings, specifications, calculations, plans (including the Equipment Accessibility Plan), reports and other Design documentation (including all media) for the Work, setting forth in detail the requirements for the construction of the Facility in accordance with this Agreement (collectively the “**Design Documents**”). Contractor shall Design the Facility in accordance with Project Requirements and to be capable of operating in conformance with the Project Requirements. During performance of the Work, Contractor shall upload to and maintain the Design Documents on a web-based database as and when such Design Documents (or iterations thereof) are completed or revised and Owner shall have unlimited access (including download capability) to the Design Documents on such web-based database. Contractor will provide hard-copy Design Documents upon request. Notwithstanding anything in this Agreement to the contrary, Contractor shall not commence any of the Work depicted in a Design Document until Contractor has submitted to Owner and received the approval of the Owner for the Equipment Access Plan (and if any further Design Work necessitates any revision to the Equipment Access Plan, until Contractor has submitted and Owner has approved the applicable revisions to the Equipment Access Plan).

4.7.2 Reviews and Holds. Design Documents will be available to Owner electronically in an agreed format and in hard copy. Owner will be entitled, but not obligated, to review and comment upon the Design Documents and other required submittals in accordance with **Exhibit X** prior to Contractor commencing with any subsequent phase of the Work related to such Design Documents or submittals. Contractor shall give due consideration to Owner’s comments in the final version of the Design Documents or submittals. Design Documents will be deemed final when stamped by Contractor as “issued for permit or for construction,” except to the extent such documents are subject to review, comment and approval in accordance with **Exhibit X** by Owner.

Design Documents that are required to be certified or under seal shall be certified or sealed by professional engineers, licensed and qualified to perform engineering services in the applicable jurisdictions. In no event will any review, comment, or approval of Owner, or acceptance or acknowledgment of any of the Work, in any way, relieve Contractor of any of its guarantees or obligations hereunder, including its full responsibility for Defects, confirming all quantities, selection of fabrication processes, construction techniques, the accuracy of the dimensions, details and the quality of its instruments of service prepared in connection with the Work as well as its responsibility for the quality, integrity, safety, and timely performance of the Work.

4.8 Quality Control. Contractor shall develop, implement and maintain a quality assurance plan for the Work in accordance with the provisions of **Exhibit A** which must include: quality assurance; management and control of the Design, engineering, construction, procurement, and supply services; and management and control of Subcontractors and Subcontracts. Such plan must be designed to meet Project Requirements, include procedures for effective implementation, and must be submitted to Owner within ninety (90) Days of the Effective Date for Owner's review and approval. Contractor shall diligently revise the plan as necessary to obtain Owner's approval. Contractor shall also require Major Subcontractors to establish, implement, and maintain comparable quality control and safety programs with respect to their respective portions of the Work. Compliance with the quality assurance plan will not relieve Contractor of any duty, obligation or responsibility under this Agreement.

4.9 Training. Contractor shall develop and implement a program to adequately instruct and train personnel made available by Owner on a Subproject by Subproject basis in accordance with the provisions of **Exhibit U**. Notwithstanding any other provision of this Agreement, training materials are not Confidential Information. Contractor grants Owner the right to record all training sessions and replay or otherwise provide such recordings for retraining or training of others. Contractor shall provide technical assistance to Owner's operating personnel in connection with the development of training procedures.

4.10 Certain Contractor-Provided Items. Contractor shall provide and pay for all utilities and associated fees (not provided or paid for by Owner pursuant to **Section 5.3**) required in connection with the Work including telephone service, Internet service, Consumables, sanitary facilities, and waste and sewage disposal, including sanitary sewage, and wastewater disposal. Contractor's responsibility for payment shall include all rental, connection, removal, usage, and other costs or fees. Contractor shall provide its own information technology and telecommunications, cable, and satellite communications. Contractor shall be responsible for providing a first fill of all Consumables as well as refills and replacements during the period prior to Commercial Operation. Contractor shall "top off" Consumables, as appropriate, promptly after Performance Guarantee Tests that occur prior to or as a condition of Commercial Operation. Contractor shall use its best efforts to use the same products for Consumables that are used by Owner in the Existing Facilities.

4.11 Equipment Subcontractor Presence. Contractor shall be responsible for arranging and paying for any Equipment Subcontractor representative that it deems necessary to be present: (i) at any of the training sessions; (ii) for erection supervision; (iii) for commissioning; (iv) during the Performance Guarantee Tests, or (v) at any other time.

4.12 Current Records; As-Built Drawings

4.12.1 Extranet and Job Site Documents. Contractor shall establish a secure Internet-based extranet that will allow Owner to access (including download capability), on a seven Day a week, twenty-four hour a Day basis, all Design Documents (and other agreed Information) as and when produced by Contractor or as otherwise made available to Contractor. Contractor shall submit all Design Documents (and other agreed Information) it is required to submit to Owner hereunder by uploading such Design Documents and Information and immediately sending an e-mail-only notice describing the contents of such upload to the Owner's recipients of notice designated in **Section 25.5**. Contractor shall maintain such extranet on a current basis and ensure that the applicable Design Documents, as appropriate, are marked currently to record changes during the Design process and during construction. Contractor shall design the extranet to allow Owner's Design comments and submissions to Contractor to be uploaded for delivery to Contractor. Contractor shall also maintain at the Job Site one record copy of approved shop drawings, product data, samples and other submittals required by Contractor, all of which must be available for Owner's use at all times. Contractor will provide hard copy Design Documents to Owner upon request. From and after Contractor's mobilization to the Job Site, Contractor shall prepare and display for Owner's benefit on the Job Site a visual depiction, in a storyboard format reasonably acceptable to Owner, of the Work to be performed during the current Month and the following Month.

4.12.2 Transition. Contractor shall maintain such extranet on a current basis until one-hundred and twenty (120) Days following the expiration of the Warranty Period, as it may be extended. At least sixty (60) Days prior to terminating such extranet or Owner's access thereto, Contractor shall provide to Owner (in an agreed electronic format) an organized, searchable, editable, electronic copy of all Design Documents and other Information on the extranet. As-Built Drawings on the extranet must show the final configuration of the Work resulting from all changes made during construction to the Design Documents.

4.12.3 Final Completion. Prior to and as a condition of Final Completion of each Subproject, Contractor shall submit a hard-copy set as well as a set of reproducible record drawings (in formats requested by Owner and CAD disks) showing all changes made during construction to the Design Documents and to the drawings of the Existing Facilities.

4.13 Transportation and Storage. Contractor shall arrange and pay for all packing, transportation, freight, unloading, storage, and transfer costs (including duties and other charges) of every kind and nature in connection with the Work. Equipment and other items that are stored at a location other than on the Trimble County Generating Station Site shall be (i) stored in a manner consistent with the Project Requirements and only at locations that have been identified in writing to Owner and (ii) properly tagged and identified as Owner's property and segregated from other goods not intended for use in, or in connection with, the Facility. Contractor shall arrange for and ensure the security of all such items while in transport or in storage off or on the Job Site. Contractor shall be responsible for arranging all shipments of all Equipment to the Job Site and shall consign such shipments to itself as consignee at the project shipping address, costs fully prepaid. Contractor shall be responsible for making demurrage agreements and settlement



with carriers for its shipments. Contractor shall advise Owner in advance of major shipments of Equipment and shall coordinate with Owner the arrival, loading, unloading, and release of carriers' equipment. If Contractor is unable to promptly unload its shipment, Contractor may notify Owner of such inability at least two (2) Days in advance of arrival. Owner, at Contractor's risk, may, but shall not be obligated to, unload or make arrangements for others to unload such shipments and Contractor shall reimburse Owner for reasonable expenses (including internal and Affiliate expenses as well as Third Party expenses) incurred in doing so.

4.14 Operating and Maintenance Manuals. Contractor shall prepare and provide to Owner the Operating and Maintenance Manuals for each Subproject in accordance with the requirements of Exhibit V. The portions of the Operating and Maintenance Manuals that pertain to a particular item of Equipment shall be provided no later than thirty (30) Days before delivery of such item of Equipment. In any event, all final, Owner approved Operating and Maintenance Manuals for each Subproject shall be provided prior to Commercial Operation for that Subproject.

4.15 Control of Work. Contractor shall be solely responsible for all Design and construction means, methods, techniques, sequences, procedures, quality assurance, and quality control programs in connection with the performance of the Work.

4.16 Emergency Response. At least forty-five (45) Days prior to Contractor's mobilization to the Job Site, Contractor shall develop and provide to Owner an emergency response plan for use in connection with emergency situations that may occur on the Trimble County Generating Station Site and arise out of its performance of (or failure to perform) the Work. Within fifteen (15) Business Days of its receipt of such plan, Owner will provide its comments to Contractor. Contractor shall incorporate Owner's comments into a final version of such plan and revise the plan, as necessary, and issue the final version within fifteen (15) Days of receipt of Owner's comments, but in any event at least fifteen (15) Days prior to mobilization to the Job Site. If such an emergency situation occurs, Contractor may not rely on the services of emergency response teams of Owner and shall put its emergency response plan into effect and take such other actions as are necessary to stabilize and ameliorate the situation. Immediately upon the occurrence of an emergency endangering human health or safety, including environmental harm, or material damage to property, Contractor shall: (i) implement its emergency response plan; (ii) without limiting its other reporting obligations hereunder, immediately orally notify an individual on the Emergency Notification List; (iii) cooperate with Owner by providing information, documentation, and reports as may be appropriate such that both Parties can (a) fulfill all reporting obligations required by Applicable Law and (b) implement procedures appropriate to avoiding a repetition of such occurrence; and (iv) if Owner's emergency response team is at the location of the emergency and informs Contractor's responding personnel that it is taking control of the response, Contractor shall assist as requested and not interfere with Owner's emergency response team.

4.17 Local Conditions. Information on the Trimble County Generating Station Site, Job Site and for all Units furnished by Owner in specifications, drawings or otherwise is made without representation or warranty of any nature by Owner, is not guaranteed by Owner, and is furnished solely for the convenience of the Contractor. Contractor represents that it has taken steps necessary to examine and ascertain the nature and location of and all conditions relevant

to the Work and its surroundings, and that it has investigated and satisfied itself as to the general and local conditions that can affect the Work, the Job Site, the Trimble County Generating Station Site, the performance of the Work, or the construction and operation of the Facility, including: (i) conditions bearing upon access, egress, transportation, waste and water disposal, handling, laydown, parking, and storage; (ii) the availability, nature, and conditions of labor, materials, water, electric power, the Internet, other utilities, and roads; (iii) Physical Conditions; (iv) typical uncertainties of weather (*i.e.*, other than weather which constitutes a Force Majeure); (v) the availability and character of Construction Aids, Equipment or other facilities needed preliminary to and during the performance of the Work; (v) the condition of the Existing Facilities; and (vi) the proximity of the Existing Facilities, local residences and businesses. Contractor has conducted a transportation survey to assess the circumstances affecting delivery of Equipment, Consumables, and Construction Aids to the Job Site and assumes the risks related to such delivery. Contractor acknowledges that craft labor and other individuals that are to be present on the Trimble County Generating Station Site for the performance of all or any portion of the Work will be required to park at near-by and potentially remote locations on the Trimble County Generating Station Site. Contractor shall provide transportation within the Trimble County Generating Station Site for such individuals as necessary. Contractor assumes the risk of such conditions and the conditions of the Job Site and other portions of the Trimble County Generating Station Site on which Work is to be performed as more particularly described in **Section 4.18**. Any failure by Contractor to take the actions described in this **Section 4.17** or **Section 4.18** will not relieve Contractor from responsibility for estimating properly the difficulty, time and cost of successfully performing the Work, or for proceeding to successfully perform the Work without additional expense to Owner and without impact to the Major Contract Milestones. Contractor shall only be entitled to adjustments to Contract Price and Major Contract Milestones to the extent provided in **Articles 9 and 10**.

4.18 Job Site Conditions. Contractor has inspected the Job Site, the other portions of the Trimble County Generating Station Site on which Work or access is to occur, the Existing Facilities, and surrounding locations and has had an opportunity to conduct such tests as it may desire, and has reviewed the information provided by or on behalf of Owner (copies of which are attached or referenced in **Exhibit S** and/or **Exhibit A**) relating to river water conditions and surface and subsurface conditions, to the extent it deems necessary for its purposes, and is familiar with the conditions thereof related to the performance of the Work. Contractor is aware of the karstic character of the Trimble County Generating Station Site and the Job Site. Contractor further understands the scope of construction activity other than the Work that is and will be undertaken on the Trimble County Generating Station Site during the term of this Agreement and has taken the inherent constraints associated therewith into account in agreeing to the Major Contract Milestones and the Contract Price. Information provided to Contractor concerning the Job Site, other portions of the Trimble County Generating Station Site, the Existing Facilities or surrounding areas, including the information provided in **Exhibit S** and/or **Exhibit A**, specifications, Design documentation or otherwise is made without representation or warranty of any kind or nature. Such information is not warranted by Owner to be accurate, complete, or otherwise suitable or sufficient for Contractor's purposes and is provided solely as a convenience to Contractor. Any reliance thereon by Contractor is at its sole risk. Contractor shall have a geotechnical investigation of the Job Site performed within sixty (60) Days of the Effective Date and provide a copy of the geotechnical report to Owner promptly when received from its geotechnical Subcontractor. Differing Conditions will neither be deemed nor constitute

an Excusable Event Basis except to the extent that such Differing Conditions meet all three of the following criteria: (i) they are underground conditions, (ii) they are detailed in the geotechnical report referred to in the preceding sentence, and (iii) they are detailed in a written notice Contractor gives Owner within ninety (90) Days of the Effective Date. Notwithstanding the foregoing, the discovery of Pre-Existing Hazardous Substances at the Job Site will be handled as provided in **Article 19**.

4.19 Witnessing and Inspection Rights. Owner and its employees, agents, representatives, and invitees are hereby granted access by Contractor to the Work (including the Design Documents) at all times so as to enable them to witness and inspect the Work, including inspection at the point of fabrication, sub-assembly, preparation for shipment or elsewhere. Contractor shall cooperate with Owner in scheduling visits to Subcontractor factories or sub-assembly locations for such Persons for purposes of inspecting the Work. Owner has the right to reject any portion of the Work that does not comply with Project Requirements. Contractor shall also afford Owner with the opportunity to witness the events set forth in **Exhibit X** (Submittals Reviews and Hold Points) and such other events as to which Owner gives Contractor notice. Contractor shall provide written notice to Owner of all events Owner is entitled to witness pursuant to the terms of Subcontracts with Major Subcontractors promptly upon execution of such agreements. Contractor shall provide Owner with reasonable notice (but not less than fifteen (15) Days in each instance) of the schedule of the occurrence of all such witness opportunities and with reasonable advance notice of any rescheduling of all such events. Contractor shall cause such events to appear on the Project Schedule.

4.20 Use of Site. Contractor's access to the Job Site and other portions of the Trimble County Generating Station Site provided for in **Section 5.5.1** shall be subject to the restrictions set forth in **Section 5.5.1** and this **Section 4.20**. Access to perform Work on portions of the Trimble County Generating Station Site outside of the Job Site will be on an as-needed basis as requested by Contractor sufficiently in advance of such needs to allow Owner to schedule such activities without adversely impacting the operations of or related to any of the Existing Facilities. Contractor shall be entitled to utilize the internal roadways of the Trimble County Generating Station Site as indicated in **Exhibit S**. Such use is not exclusive and must not interfere with the ongoing operations of the Existing Facilities or other construction or maintenance activities affecting Existing Facilities. Any use of such roadways that could result in such interference shall be subject to the prior written approval of Owner. The Existing Facility has both baseload and peaking generation serving the needs of ratepayers and other customers and supporting the electrical transmission grid. It is critical that the operation of the Existing Facility not be interfered with or otherwise impaired or put at risk except to the extent absolutely necessary for the performance of the Work (the preceding two sentences outline the "**Existing Facility Requirements**"). Even if such interference, impairment or risk is absolutely necessary, Contractor shall be required to coordinate its applicable activities with Owner so that Owner can act to anticipate difficulties that may thereby arise (and Contractor shall comply with Owner's reasonable instruction such as requiring such activities take place at such times and in such a manner so as to reduce any adverse impact on Owner, ratepayers, other customers, and the electrical transmission grid). Contractor shall confine its operations at the Job Site to areas permitted by Applicable Law and this Agreement and, with respect to the Existing Facilities or other areas of the Trimble County Generating Station Site where Work is to be performed, the instructions of Owner. Notwithstanding anything in this Agreement to the contrary, Contractor

may not interfere with the conduct of the Existing Facilities (including operations, maintenance, construction, deliveries, and other activities) or any business operating adjacent to or in close proximity to the Job Site or the Trimble County Generating Station Site. Contractor shall coordinate the performance of the Work with the requirements and business operations of the Existing Facilities and maintenance and construction activities related thereto. Contractor shall prepare a Job Site coordination plan to be delivered to Owner no later than forty-five (45) Days prior to Contractor's mobilization to the Job Site, setting forth the procedures and guidelines to be implemented by Contractor, Subcontractors, and Owner to maximize site coordination and minimize the likelihood of interference and any adverse effect therefrom on the operations of the Existing Facilities. Owner will be entitled to review and comment on such plan and Contractor shall incorporate any such comments into the final version of such plan. Contractor shall also implement and enforce rules necessary for safe, efficient, and proper prosecution of the Work. At a minimum, Contractor, Subcontractors, and their respective employees and invitees shall be subject to and shall strictly comply with the health, safety, and environmental protection procedures and regulations established by Owner, including the procedures and regulations set forth in **Exhibit H**, as they may be changed from time to time in the sole discretion of Owner. Failure to strictly comply with the requirements of **Exhibit H** shall be grounds for exclusion from the Job Site, the Trimble County Generating Station Site or the Existing Facilities, at the sole discretion of Owner, and any adverse consequence thereof shall be borne by Contractor. In addition, Contractor shall:

- (i) use, and shall cause all Subcontractors and their respective employees to use, only such gate(s) for access to the Job Site, as identified in **Exhibit S**, except as otherwise designated by Owner. Contractor shall not load, or permit to be loaded, any part of the Work in such fashion that may damage any part of the Work or endanger safety. Equipment, Consumables, and Construction Aids must be received, stored and routed, and all waste and demolition debris shall be routed and stockpiled in strict accordance with the Job Site coordination plan prepared by Contractor and approved by Owner, as described above;
- (ii) be responsible for the security of the Work and the Job Site, it being acknowledged by Contractor that neither Contractor nor Subcontractors are entitled to rely on any security measures or procedures in place at the Trimble County Generating Station Site for the protection of individuals or property;
- (iii) at least forty-five (45) Days prior to Contractor's mobilization to the Job Site, Contractor shall develop and provide to Owner a temporary facilities plan. Within fifteen (15) Business Days of its receipt of such plan, Owner will provide its comments to Contractor. Contractor shall incorporate Owner's comments into a final version of such plan and revise the plan, as necessary, and issue the final version at least fifteen (15) Days prior to mobilization to the Job Site. Thereafter, Contractor shall implement the provisions of the plan, confine temporary structures, machinery, and other property of Contractor (and Subcontractors), and the storage of Equipment, Consumables, and Construction Aids to the laydown or other areas more specifically identified in **Exhibit S**, or otherwise provided in the plan, permitted by Applicable Law, by this Agreement and by Owner. Temporary



- structures shall be neat in appearance, must not constitute a fire or any other safety hazard and must be properly maintained;
- (iv) obtain approval from the Owner Representative prior to performing any Work on the Trimble County Generating Station Site that is not wholly within the Job Site. Requests for a work order shall be made in writing on the appropriate form set forth in **Exhibit F-7** (as such form may be modified by Owner from time to time) within a reasonable time prior to the need therefor. Contractor understands that it must consult with the Owner Representative to assure that operation of the Existing Facilities will not be adversely affected by the Work to be performed and that decisions made by the Owner Representative hereunder will be based upon the operating, maintenance, and other requirements of the Existing Facilities. Contractor further understands that certain activities associated with the Work will require advance notice or approval of Owner, including submission and approval of forms completed by Contractor. The forms to be submitted by Contractor are set forth in **Exhibit F-7** and must be completed and submitted to the Owner Representative a reasonable time prior to the time Contractor needs to conduct the subject activity;
- (v) except as expressly permitted with the prior written consent of Owner, not deliver any Equipment or perform any Work that would be considered "heavy construction" except on Business Days between the hours of 6 a.m. to 7 p.m. Contractor shall not schedule deliveries during hours that school bus transportation is scheduled to utilize roads in the general vicinity of the Trimble County Generating Station Site. Contractor shall strictly comply with all applicable sound regulations or restrictions imposed by Applicable Law to which the construction activity, the Work, or the Existing Facility is subject;
- (vi) no less than forty-five (45) Days prior to Contractor's mobilization to the Job Site, Contractor shall provide to Owner a construction environmental control plan in connection with the Work for the purpose of properly managing the sediment control, erosion, fugitive dust, storm water runoff, noise, and other adverse environmental impacts of construction, all in conformance with the Project Requirements. Within fifteen (15) Business Days of receipt of the plan, Owner shall provide comments to Contractor and Contractor shall incorporate Owner's comments into the final version of such plan which Contractor shall submit to Owner no less than fifteen (15) Days prior to the date on which Contractor mobilizes to the Job Site. Thereafter, Contractor shall implement the provisions of the plan; and
- (vii) no less than forty-five (45) Days prior to Contractor's mobilization to the Job Site (but in any case at least fifteen (15) Days prior to bringing any Hazardous Substances onto the Job Site), Contractor shall provide to Owner a Hazardous Substances management plan ("**Hazardous Substances Management Plan**") that it will vigilantly implement during performance of the Work on any portion of the Trimble County Generating Station Site. Such plan, at a minimum, must incorporate the Trimble County Generating Station policies and procedures and

require Contractor to cooperate and coordinate with Owner. Within fifteen (15) Business Days of receipt of the plan, Owner shall provide comments to Contractor and Contractor shall incorporate Owner's comments into the final version of such plan which Contractor shall submit to Owner no less than fifteen (15) Days prior to the earlier to occur of bringing any Hazardous Substances onto the Job Site or the date on which Contractor mobilizes to the Job Site. Thereafter, Contractor shall implement the provisions of the plan.

4.21 Compliance with Applicable Law. Contractor shall comply, and shall cause Subcontractors to comply, with Applicable Law in effect from time to time relating to the Work and/or the Facility, and shall give all applicable notices pertaining thereto. Contractor shall ensure that the Facility, as designed, engineered, and constructed, complies and, when fully integrated into the Units and operated in accordance with Prudent Utility Practices, will be capable of complying with Applicable Law.

4.22 Permits and Approvals. Contractor shall secure and pay for any and all Permits necessary for the proper execution and completion of the Work, except Owner Permits. Contractor shall maintain and comply with all Permits and monitor and keep accurate records of the status of all Permits. Permits obtained by Contractor shall be maintained on the Job Site and copies shall be available to Owner on request.

4.23 Periodic Reports and Meetings.

4.23.1 Monthly Status Report. Within ten (10) Days after the end of each Month after the Effective Date, Contractor shall prepare and submit to Owner a status report, covering the previous Month, that will be prepared in a manner, level of detail, and format acceptable to Owner and that must include: (i) a detailed description of the progress of the Work and activity status, including a critical path method chart illustrating the progress which has been made during the Month which is the subject of the status report together with an updated Project Schedule pursuant **Section 6.4** and a comparison of the updated Project Schedule with the Project Schedule provided with the immediately previous monthly status report; (ii) a statement of any significant issues and trends, including Adjustments for Change Orders, Change Determination Requests and claims related to Excusable Events that remain unresolved, and Contractor's recommendations for resolution of the same; (iii) an updated report as to Contractor's adherence to the Project Schedule; (iv) a summary of any significant events that are scheduled or expected to occur in connection with the Work during the following thirty (30) Days; (v) a description and status of quality assurance issues identified by Contractor, a Subcontractor or Owner; (vi) status of significant Equipment deliveries; (vii) a report on safety program performance and results for the previous Month, including statistics, lost time accidents, OSHA recordables and near misses, as well as root causes and corrective actions; (viii) the Monthly reports required pursuant to **Section 25.24.3**, (ix) the information required by **Section 11.3**; (x) the report required by **Section 10.4**, and (xi) such additional information reasonably requested by Owner. Contractor shall also comply with the requirements of **Exhibit M**.

4.23.2 Attendance and Participation. Until Final Completion of the last Subproject to achieve Final Completion, Contractor shall attend and participate in meetings on a daily, weekly, and Monthly basis between Contractor and Owner for the purpose of discussing the status of the Work and anticipating and resolving problems. So long as procurement of Equipment has not been completed, there shall be one meeting at least each Month (with the first meeting occurring within thirty (30) Days of the Effective Date) at which the status and planning of Contractor's procurement effort is discussed with Owner. Such meetings may also include other Persons at the invitation of Owner, such as consultants of Owner; **provided**, such Persons execute reasonable and customary agreements to maintain Work-related information on a confidential basis. Other Persons shall be permitted to attend with the prior consent of Owner. Contractor shall prepare and distribute notes of Monthly meetings for Owner's comments, which Contractor shall incorporate into the notes. Publication or distribution of (or Owner's comments on) notes of such meetings shall neither constitute a notice pursuant to **Section 25.5** for any purpose under this Agreement nor a waiver, Modification, or other permitted basis to assert Claims under this Agreement. No implication whatsoever shall be drawn as consequence of a failure by any Party to comment upon or object to meeting notes prepared or distributed by the other Party.

4.24 **Signage**. Contractor shall not display, install, erect, or maintain any advertising or other signage at the Trimble County Generating Station Site without Owner's prior written approval (which Owner may withhold at its sole discretion), except as may be required by Applicable Law.

4.25 **Spare Parts**. Contractor shall provide and properly store and maintain in strict accordance with manufacturer's requirements all spare parts, including start-up and commissioning spare parts, prior to Commercial Operation for each Subproject, in accordance with Project Requirements. Spare parts must be equivalent or better to and interchangeable with the original parts they are intended to replace. Such spare parts must be of the same material, of identical manufacture, and must present the same properties as the corresponding parts of the Equipment (except to the extent upgraded by the manufacturer thereof). Spare parts must be properly treated and packed for prolonged storage, considering Job Site ambient conditions. All boxes and packing must be labeled, marked and numbered for identification and a detailed packing list shall be provided by Contractor. Contractor shall deliver spare parts (other than commissioning spares) to storage locations specified by Owner. Contractor shall implement all necessary precautions for proper storage. Contractor shall give Owner the right to purchase, at no more than Contractor's out-of-pocket cost, any surplus items on the Job Site upon Final Completion. Contractor shall be entitled to use any spare parts that are acquired by Owner and are then available on the Job Site; **provided**, that Contractor shall place and expedite an order to replace the spare parts it uses immediately and any such parts shall be replaced DDP (Incoterms 2010) Job Site as soon as possible at Contractor's expense. For each Subproject, Contractor shall provide to Owner a list of strategic and other spare parts that Contractor and Subcontractors recommend be purchased to maintain reliable operations. Such spare part list shall (i) be in an electronic format fully compatible for downloading into the spare parts monitoring software maintained by Owner or in such other format as Owner may designate, (ii) identify for each such part the price (which shall be valid for no less than twenty four (24) Months after Commercial Operation), the manufacturer and other vendors, the manufacturer's part name and the manufacturer's part number, expected shelf and useful lives, typical delivery lead times, and



such other information as set forth in **Exhibit F-11** or otherwise reasonably requested by Owner, and (iii) be delivered no later than one hundred eighty (180) Days prior to the Scheduled Mechanical Completion Date of the applicable Subproject (provided, that the entries of such list that pertain to a particular item of Equipment shall be provided no later than sixty (60) Days after a purchase order, purchase contract, or other commitment or agreement is issued by Contractor to procure such item of Equipment, if earlier). At Owner's request, Contractor shall purchase and sell to Owner spare parts in addition to those required to be provided under the Technical Specification. The charge to Owner for such additional spare parts shall be Contractor's out-of-pocket cost for such parts. Contractor will cooperate with Owner to determine the best pricing for obtaining spare parts. The decision of whether and what spare or replacement parts Owner is to purchase is Owner's alone.

4.26 Interference with Traffic. Contractor shall carry out the Work so as not to damage or interfere with access to, use, or occupation of, public or private roads, docks, waterways, footpaths, or other properties, whether in the possession of Owner or of any other Person. Contractor shall communicate with, and ascertain the requirements of, all Governmental Authorities in relation to access to and egress from the Trimble County Generating Station Site (and the Job Site) and shall comply with those requirements. Contractor shall be deemed to have satisfied itself as to and shall be fully responsible for the routing for deliveries of Equipment, Consumables, and Construction Aids, including delivery of heavy, large, or oversize loads to the Trimble County Generating Station Site or the Job Site, as appropriate.

4.27 Supply of Water and Facilities. Contractor shall make available on the Job Site (i) an adequate supply of potable water and (ii) sanitary facilities, for the benefit of those working on the Job Site.

4.28 Cutting and Patching. Contractor shall be responsible for all cutting, repairing, fitting, or patching which is required to complete or repair the Work or to make its parts fit together properly. It is the intent of this Agreement that all areas requiring cutting, fitting, repairing, or patching will be restored to a completely finished equivalent-to-new condition.

4.29 Cleaning Up. Contractor shall, at all times during the term of this Agreement, keep the Job Site, other portions of the Trimble County Generating Station Site and surrounding streets (whether public or private), properties, waterways, sidewalks, and other areas free from accumulations of waste materials, rubbish, dirt, debris and other garbage, liquid and non-liquid materials whether spilled, dropped, left behind, discharged, blown out, or leaked during performance of the Work. Contractor shall maintain its working, storage, laydown, and parking areas in a clean and non-hazardous condition, and shall employ adequate dust control measures. Contractor must provide adequate tire washing facilities for trucks leaving the Job Site and/or the Trimble County Generating Station Site. Contractor shall properly maintain Equipment and Systems containing any Hazardous Substances. Contractor shall repair (if necessary) roads and other infrastructure (internal, public or private) on or in the vicinity of the Job Site and the Trimble County Generating Station Site that are adversely affected by Contractor (or Subcontractors) and their employees, agents and representatives' construction activities or traffic, as needed. Hazardous Substances, including chemicals used by Contractor or Subcontractors, must be properly handled and must be properly disposed of off of the Trimble County Generating Station Site. Prior to Final Completion of the last Subproject to achieve Final

Completion, Contractor shall clean up and restore the entire Job Site (including laydown, parking, and construction areas), including, the removal of all tools, trailers, surplus, temporary power cables, laydown gravel, waste materials and rubbish, and cleaning of all glass (inside and out), removal of all paint spots and other smears, stains or scuff marks, cleaning of all plumbing and lighting fixtures, washing of all concrete, tile, and finished floors, and otherwise leaving the Job Site and the Trimble County Generating Station Site where Work was performed or otherwise utilized by Contractor neat and clean. If Contractor fails to take the actions required by this **Section 4.29**, Owner may do so (or cause it to be done) and the cost thereof will be charged to Contractor.

4.30 Waste Disposal. Contractor is responsible for disposal of all wastes generated by it or Subcontractors during the performance of the Work, including Hazardous Substances, waste water, sanitary wastes, demolition debris, construction debris, spoil, surplus excavation material, driven water, office wastes, and wastes related to preparation, commissioning, testing, and start-up of Systems or Equipment. Whenever feasible, Contractor shall recycle waste metal (e.g., steel metals, pipe and copper) and all proceeds from such recycling shall be credited to the Owner. All such wastes must be handled, stored, or disposed of in accordance with Applicable Law in a suitable off-site location except to the extent otherwise directed by Owner in writing. All costs related to such waste disposal are the responsibility of Contractor.

4.31 Water Control. Contractor shall carry out all dewatering, storm water control drainage, pumping, and disposal required to keep the Work dry during performance of the Work. Contractor shall properly dispose of Hazardous Substances (including site soils or water that may be contaminated), waste materials, trash, or rubbish in compliance with Applicable Law. Contractor shall not discharge contaminated water into any area that will pollute a natural stream or body of water. No discharge of contaminated water may be permitted to cause contamination of soil, natural streams or other bodies of water (whether documented or undocumented) in violation of any Applicable Law.

4.32 Permit Assistance. Contractor, at its expense, will reasonably assist and support Owner's efforts to obtain Owner Permits, or to otherwise satisfy the conditions thereof. By way of example, such assistance includes providing customary information and documentation, and Design data. Contractor shall provide all drawings, documents and other information, stamped as appropriate, that are necessary for Owner to properly and timely complete and defend all Permit-related hearings and actions.

4.33 Deliveries by Truck or Barge.

4.33.1 Notice. Contractor shall provide Owner with reasonable advance notice of any delivery of Equipment that is to arrive by barge or other water-borne carrier or that is to arrive by truck and is oversized or is extraordinary in any other material way.

4.33.2 Dock. Contractor shall be entitled to use the equipment unloading Dock (subject to **Section 4.33.3**) as described in **Exhibit S** and shall be entitled to repair, reconstruct, renovate, modify or replace the Dock facilities and crane (with the prior written consent of Owner, which will not be unreasonably withheld, provided that such modifications will not adversely affect Owner's use of the Dock for Owner's purposes in

the future). Use by Contractor of the Dock is conditioned upon Contractor's strict compliance with Applicable Law, Trimble County Generating Station Site regulations, and any other rules and regulations provided to Contractor by Owner. Contractor understands and expressly acknowledges that the Dock is made available on an "as is" basis. It is Contractor's entire responsibility to determine the suitability of the Dock and to repair, reconstruct, renovate, modify or replace any or all of such facilities or equipment to make them suitable for Contractor's use. No failure of the Dock and associated facilities to be suitable for Contractor's use shall constitute an Excusable Event Basis. Any improvements to the Dock shall be left in place and in good working order upon Final Completion.

4.33.3 Use by Owner and Others. Contractor acknowledges that Owner may use or allow others to use all or any portion of the Dock on or before Final Completion. Owner will notify Contractor of the need for such use in writing and the Parties shall coordinate their respective schedules to accommodate such use. In the event of a conflict that cannot be reconciled, Owner shall be entitled to direct the use of the Dock. Contractor further acknowledges that from time to time Owner permit certain vessel service providers to tie-up to or otherwise utilize all or any portion of the Dock and Contractor will accommodate such use; provided, however, if there are times when use by these vessel service providers would interfere with the performance of the Work, Contractor shall notify Owner and such vessel service providers will not be permitted to utilize the Dock at such times. Owner shall be responsible for any repairs to damage to the Dock that occur as a consequence of the use by Owner or others that Owner permit to use the Dock and if such damage or repair impacts Contractor's performance of the Work, such impact shall constitute an Excusable Event Basis.

4.33.4 Force Majeure Impacts. Contractor understands that from time to time the Dock has been entirely submerged and remains subject to periodic flooding. Contractor acknowledges that it has access to and has evaluated (i) Ohio River data including river run records and (ii) Corps of Engineers records and policies that may, directly or indirectly, affect the use or availability of the Dock. Lack of usability of the Dock because of flooding or other Ohio River conditions shall not constitute a Force Majeure.

4.33.5 Dredging. To the extent permitted by Applicable Law, Owner, at Contractor's expense, shall use its reasonable efforts to obtain such permission as may be necessary to allow Contractor to utilize Owner's § 404 Dredge and Fill Permit and to allow Contractor to discharge dredged materials (provided such materials do not contain or constitute Hazardous Substances) on land owned by Owner.

4.34 Artifacts and Other Valuable Items. If Contractor should discover any artifact, fossil or other items of historical, religious, monetary, geological, archeological or other value, it shall immediately cease Work in the immediate vicinity thereof, notify Owner and take reasonable actions to preserve and protect such items from damage or theft. All such items are the property of Owner and Owner shall provide Contractor with direction on how to proceed.

4.35 Release. Contractor is responsible for making all investigations and determinations necessary or desirable for it to enter into this Agreement. Contractor hereby releases Owner from any and all Liabilities in any way arising out of any information, document, statement or report

related to the Existing Facilities, the Job Site or the Trimble County Generating Station Site. Contractor expressly disclaims any entitlement to any Modification based on its reliance on information, actions or omissions of Owner with respect to any information, document, statement or report related to the Existing Facilities, the Job Site or the Trimble County Generating Station Site set forth herein or otherwise provided by or on behalf of Owner.

4.36 Covering. No portion of the Work (including foundations) may be covered or otherwise be made inaccessible for inspection without (i) conducting (and passing) any test or inspection (and allowing Owner to conduct any inspection) required pursuant to this Agreement and (ii) allowing Owner to inspect such Work if a Hold Point has been established in relation to such Work. If any Work is covered or made inaccessible for testing or inspection in violation of the previous sentence, Contractor shall uncover (or make accessible) such Work and pay all costs resulting therefrom, including recovering or reinstallation costs. There will be no adjustment to the Contract Price or Major Contract Milestones or other Modification in connection therewith. In addition, if Owner request to inspect any other portion of the Work (including foundations) that have been covered or otherwise made inaccessible, Contractor shall uncover it or otherwise make it accessible for inspection and (i) if such portion of Work is in accordance with the requirements of this Agreement, such uncovering and replacement will constitute an Excusable Event Basis and (ii) if such portion of Work is not in accordance with the requirements of this Agreement, Contractor shall pay all costs related to such uncovering and replacement and there will be no adjustment to the Contract Price or Major Contract Milestones or other Modification in connection therewith.

4.37 Administrative Facilities. Contractor shall provide adequate furnished office facilities for Owner's personnel in Contractor's offices in Atlanta, Georgia, during the Design and procurement phase of the Work. Contractor shall provide temporary office facilities for itself on the Trimble County Generating Station Site. Such facilities, together with office equipment, sanitary facilities, and communications services are to be provided in accordance with the Technical Specification.

4.38 No First of a Kind. Without Owner's written consent, Equipment will not include prototype equipment, meaning any equipment or component thereof that is at that stage in the evolutionary developmental process where the design, functionality, environmental suitability, material composition, scale, reliability, maintainability, and other operational characteristics of the equipment or any component thereof has not been substantiated by at least two (2) full operating years of commercial experience.

4.39 Compliance with Owner Security Controls. All Work performed by Contractor shall comply with Owner's security protocols as may be in effect from time to time. If Owner modifies its security protocols after the Effective Date, and such modification increases or decreases Contractor's costs in connection with the Work, or adversely affects Contractor's ability to meet the Major Contract Milestones (based on the critical path), such a modification will be treated as an Excusable Event Basis. The security protocols implement, among other things, certain requirements (the "NERC Requirements") of NERC's Reliability Standards for the Bulk Electric Systems of North America (collectively, the "NERC Standards") as in effect from time to time. Any penalties arising from the failure of Contractor to comply with the security protocols are subject to indemnification under **Article 20** of this Agreement. In

performing any Design Work, Contractor shall do so in a way that (a) minimizes the need to establish any additional “physical security perimeters” at any facility of the Owner to the maximum extent practicable and (b) is compliant with all announced NERC Standards (even if those standards are not yet in effect when the Work is performed). The security protocols are expected to address the following matters, among others:

- (a) Without compromising the confidentiality provisions of **Article 18**, Contractor shall at all times comply with the Owner’s information protection program(s). Among the information protected by this program are: (i) all operational procedures; (ii) lists of critical cyber assets; (iii) network topology or similar diagrams; (iv) floor plans of computing centers that contain critical cyber assets; (v) equipment layouts of critical cyber assets; (vi) disaster recovery plans; (vii) incident response plans; and (viii) security configuration information. Contractor shall protect this protected information from disclosure consistent with the program.
- (b) Contractor shall **IMMEDIATELY** orally notify (not by voice mail or email) a person on the Emergency Notification List (and immediately follow that oral notification with a confirming email) if any of Contractor’s personnel who have key card access to a restricted area or electronic access to a protected system no longer require such access (*e.g.*, if such personnel is terminated, resigns, is reassigned, completes the applicable assignment, etc.).
- (c) If any Contractor personnel require key card access to a restricted area or electronic access to a protected system, Contractor shall ensure that such personnel complete, and retake as requested, all necessary NERC training as requested by Owner.
- (d) If any Contractor personnel require key card access to a restricted area or electronic access to a protected system, Contractor shall ensure that Owner receives necessary waivers and information from Contractor’s personnel to complete, and repeat as necessary, such background checks as requested by Owner.
- (e) Contractor further acknowledges that its compliance with the NERC Requirements is a continuing obligation and survives the expiration or early termination of this Agreement during and after the performance of the Work. Upon written notice to Contractor, Owner shall have the absolute right to audit and inspect any and all information regarding Contractor’s compliance with this **Section 4.39**, and/or to require confirmation of the destruction of any documentation received from or regarding Owner.
- (f) The Owner has an Office of Compliance. Contractor is encouraged to contact Owner’s Office of Compliance to ensure Contractor understands and complies with this **Section 4.39**. Should Contractor have actual knowledge of violations of any of the herein stated policies of conduct in this **Section 4.39**, or have a reasonable basis to believe that such violations will occur in the future, whether by its own or Subcontractors’ employees, agents, representatives, or by another vendor and/or supplier of the Owner and its employees, agents, representatives or subcontractors,

or by any employee, agent and/or representative of Owner, Contractor has an affirmative obligation to immediately report any such known, perceived and/or anticipated violations to the Owner's Office of Compliance in care of Director, Compliance and Ethics, LG&E Center, 220 West Main Street, Louisville, Kentucky 40202.

4.40 Documentation Requirements or Standards. Contractor shall provide all drawings required for design, construction, and as-built in accordance with documents contained in **Exhibits A and X**.

4.41 Basis of Bid. On or before the Effective Date, Contractor shall make available to Owner a detailed line-item estimate of the Work that constitutes the agreed upon basis for the Contract Price and the schedule for the performance of the Work (the "**Basis of Bid**"). Upon such availability, Owner and Contractor shall initial each page thereof for identification. Contractor represents that the Basis of Bid constitutes the most detailed analysis and pricing and schedule build-up used by Contractor for determining its proposed pricing submitted in response to Owner's request for quotation (updated to reflect any changes from Contractor's original quotation so that the Basis of Bid reconciles in total to the Contract Price and Major Contract Milestones), including the detail for each and every direct and indirect estimated cost and mark-up (e.g., margin, contingency, etc.). From and after the Effective Date, Contractor shall provide Owner's personnel (or their designees) with unlimited access to the Basis of Bid, which access, upon Contractor's mobilization to the Job Site shall be at the Job Site. Contractor shall supplement the Basis of Bid from time to time to reflect any Modifications.

4.42 Construction Equipment. Contractor shall ensure that all construction equipment used in the performance of the Work on the Job Site shall be in first-class operating condition, safe, fit for the uses for which intended and suitable for the safe, legal and efficient performance of the Work and protection of the environment. Any such equipment that is not conforming with the foregoing shall be promptly removed by Contractor, and replaced with proper equipment.

ARTICLE 5

OWNER RIGHTS, DUTIES AND OBLIGATIONS

5.1 Key Personnel. Owner shall designate, from time to time, one or more individuals who will act on Owner's behalf, in connection with the Work, together with the scope of their authority. Among such designees there shall be appointed a principal representative of Owner (the "**Owner Representative**"), who will be Owner's authorized representative, and who will receive and initiate all communications from and with Contractor (other than Notices, which shall be made in accordance with **Section 25.5**) and who will be authorized to render decisions related to the Work and bind Owner.

5.2 Owner's Review. Owner will be entitled to review, comment on, evaluate, or approve the Design Documents and other submittals as provided in **Exhibit A** and **Exhibit X**. Contractor shall consider Owner's comments in good faith; **provided, however**, Owner will not have any responsibility or liability for the accuracy or completeness of such documents, for any

Defects therein or for any failure of such documents to comply with the requirements set forth in this Agreement, the responsibility for all of the foregoing matters being the sole obligation of Contractor. Contractor shall advise Owner in writing of the disposition of each of the comments.

5.3 Owner-Provided Items. Owner shall provide to Contractor the items listed in **Exhibit Q** in the quantities listed in **Exhibit Q**. Additional quantities shall be made available by Owner, subject to availability, at Contractor's expense. There are no other items to be provided by Owner, including items necessary for start-up.

5.4 Right to Apply Monies. Owner shall have the right to deduct from any funds or monies due or to become due to Contractor (and/or use or draw on any of the Contract Security) any amounts actually due to Owner from Contractor as a result of any Liabilities or unfulfilled obligations for which Contractor is responsible pursuant to the terms and provisions of this Agreement.

5.5 Access and Inspection.

5.5.1 Access to Site. Owner shall provide reasonable, non-exclusive access to the Job Site, other portions of the Trimble County Generating Station Site, and the Existing Facilities on which Work is to be performed to Contractor and Subcontractors, subject to Applicable Law, applicable Trimble County Generating Station Site regulations, the concurrent use by Owner and its contractors to operate, maintain, modify and otherwise utilize the Trimble County Generating Station Site, and the terms of this Agreement.

5.5.2 No Relief. No inspection or review of, or failure to inspect or review, the Work or any portion thereof by Owner or any other Person on behalf of Owner will relieve Contractor of its obligation to properly execute and complete the Work. Inspection by Owner will not be deemed to be supervision or direction by Owner, and is only for the purpose of attempting to confirm for Owner's purposes that the Work conforms to the requirements of this Agreement.

5.6 Owner Permits. Owner is responsible for obtaining Owner Permits.

5.7 Right to Carry Out the Work. If a portion of the Work is Defective, Contractor defaults under this Agreement, or otherwise neglects to carry out the Work in accordance with this Agreement and fails within a seven (7) Day period after receipt of written notice from Owner to commence and diligently continue curing such Defect, default, or neglect, Owner, without prejudice to any other rights or remedies Owner may have under this Agreement, including declaring Contractor in default, and with or without terminating this Agreement, may correct such Defect, default, or neglect at Contractor's expense (including Owner's internal, general, and administrative expenses) and Owner shall have the right to: (i) deduct an amount equal to the amounts incurred by Owner in so doing from amounts due or to become due to Contractor; (ii) use or draw on the Contract Security for such amounts; and/or (iii) obtain reimbursement of such amounts from Contractor. The correction of a Defect, default, or neglect by Owner pursuant to the previous sentence will not limit or void Contractor's warranty; **provided**, the correction of such Defect, default, or neglect by Owner is in accordance with Contractor's reasonable recommendations or, in the absence thereof, Prudent Utility Practices.

5.8 Rights Not Limited. The rights and remedies provided in this **Article 5** are in addition to, and not in limitation of, any other rights or remedies otherwise available to Owner under this Agreement.

5.9 Operating Personnel. Subject to **Section 6.14**, at such time as Contractor has achieved Mechanical Completion (except for the Tie-ins) for each Subproject, it may commence the Tie-ins of that Subproject. Upon the first Tie-in, the commissioning of the Subproject shall commence and shall continue until commissioning is completed after the final Tie-in. Owner shall operate the Units or Yard Systems (as improved by the Subproject) from and after Mechanical Completion of that Subproject with its normal complement of personnel working normally scheduled shifts. Contractor shall communicate with supervisory personnel identified by Owner to convey any directions with which it wants Owner to comply regarding the operation of the Subproject during commissioning, hot testing, and the Commercial Operation Test and any Extra Tests. Owner shall undertake to operate Subproject in accordance with such directions to the extent such directions are consistent with Prudent Utility Practices and comply with Applicable Law. If Contractor directs Owner's operation of the Facility and such direction is responsible for damage to any of the Units, Yard System or the Facility, Contractor shall: (i) reimburse Owner on demand for correction of such damage within any of the Units or Yard Systems; (ii) correct damage within the Facility; and (iii) pay liquidated damages for each resulting Unit Outage Hour, if any, in accordance with **Exhibit L**. Contractor understands that each of the Units is a critical generating resource for Owner and consequently Contractor will exert maximum efforts to give directions that are consistent with Owner's requirement to maximize Unit operations on an unrestricted basis. If Contractor desires or needs to have additional technical personnel and/or special monitoring or measuring equipment for any tests, then Contractor shall furnish such personnel or equipment at no cost to Owner. Operating personnel supplied by Owner pursuant to this **Section 5.9** shall be under the direct technical supervision and control of Contractor while on the Job Site and performing or assisting Contractor to perform any portion of the Work. Contractor shall reimburse Owner for the reasonable cost of overtime that Owner incurs with respect to operating personnel provided pursuant to this **Section 5.9**.

5.10 System Needs. Each of the Units is a critical generating resource for Owner and must be continually available for full operation, including after each Tie-in commences. Thus, Contractor shall plan and implement its Work in such a fashion to ensure that the Units can be so continually operated and that each Subproject shall achieve Substantial Completion by the applicable Guaranteed Substantial Completion Date. Contractor will prepare plans for Contingency Arrangements for each Subproject. If at any time between the Guaranteed Substantial Completion Date and the Commercial Operation Date for a Subproject, the Subproject does not meet the Minimum Required Performance, Contractor shall put the appropriate Contingency Arrangements into effect at its cost and risk. Contractor expressly disclaims any entitlement to (i) any Modification based on Contractor's costs or other impacts of preparing and/or implementing Contingency Arrangements, including the provision of treatment and transportation of CCR and (ii) use or cause Owner to use the existing CCR treatment, transportation (e.g., hydroveyors), and disposal locations (e.g., ash and gypsum ponds) as all or part of the Contingency Arrangements except to the extent consented to by Owner, which consent may be denied at Owner's sole discretion. If Owner does give such consent, Contractor shall be responsible for all costs associated with maintaining and repairing

such facilities in connection with such use, except that Owner will provide operators for routine operation of such equipment. For avoidance of doubt, such Contingency Arrangements may include treating and/or transporting the CCR using Subprojects before they have achieved Commercial Operation, so long as it can be done (a) safely and (b) in accordance with all Applicable Laws and Prudent Utility Practices. Any outage or derate of either of the Units that arises as a result of Contractor's failure to comply with this **Section 5.10** shall be subject to liquidated damages under **Section 7.1**. In addition, if at any time prior to Commercial Operation Date for a Subproject, that Subproject (or the performance of the Work) causes a spill of CCR (or any other accidental or intentional placement of CCR into a location other than to which such CCR is intended to be deposited (e.g., fly ash into the fly ash silo) or fails to properly treat CCR (e.g., causes it to have too little or too much moisture), then Contractor shall be responsible for remediating such condition (e.g., cleaning, reconditioning, disposal (to an Owner owned or controlled disposal location), etc.); provided that in all cases, Contractor shall not be responsible for any spill that is a result of the Owner's (and those for whom Owner is responsible) acts or omissions (e.g., failure of Owner's operators to comply with the Operating and Maintenance Manuals).

5.11 Contractor's Personnel. Owner has the right to object to any representative or Person employed or otherwise engaged by Contractor that engages in misconduct, is believed by Owner to lack competence for the tasks assigned, or to be disruptive or negligent while on the Job Site or the Trimble County Generating Station Site. Contractor shall remove such Person from the Job Site or the Trimble County Generating Station Site, as applicable, upon receipt of Owner's notification to Contractor's Representative. Any cost for replacement Persons will be at Contractor's expense. The rights of Owner under this **Section 5.11** are in addition to the rights of Owner with respect to the personnel pursuant to **Section 4.6**.

ARTICLE 6

PROJECT SCHEDULE

6.1 Commencement. Contractor shall immediately commence performance of the Work in its entirety in accordance with the requirements of this Agreement and continuously and diligently fulfill its obligations under this Agreement.

6.2 Turnover of the Systems. Not less than one hundred twenty (120) Days prior to commencing the turnover process contemplated by this **Article 6** for a Subproject, Contractor shall provide a detailed written turnover and start-up plan to Owner for its review and comment. Such plan must include: a complete listing of the Systems along with a scheduled turnover date for each such System and a schedule of documents to be included in the System Turnover Package that will accompany the System being turned over. Such plan shall also provide a schedule for the provision of operating personnel by Owner. Each System Turnover Package must be properly completed and include all necessary checkout and operation information to clearly indicate that the System has been completely checked out, including: instrumentation checkout and calibration data sheets, hydrostatic test reports, factory test reports, chemical cleaning and lubrication records, non-destructive testing records, operating manuals, marked-up P&IDs reflecting the as-built conditions, and electrical test data sheets, including megger test reports and vendor field reports. The data provided in each System Turnover Package must be

complete and compatible for insertion into Owner's hold card system or lock out/tag out procedures, as applicable. Owner will have thirty (30) Days to review such plan and provide written comments to Contractor. Contractor will promptly address such comments and resubmit the plan until such time as Owner approves the plan. Owner and Contractor will mutually agree on the final turnover and start-up plan prior to its implementation. Thereafter, Contractor's turnover of Systems will be accomplished as follows:

6.2.1 Ready for Turnover. When Contractor deems that it has achieved completion of construction of a System or, in the case of any System that is a modification, expansion or improvement of a portion of a Unit, completion of such modification, expansion, or improvement, in accordance with this Agreement, including static integrity tests, alignment, electrical continuity tests, lubrication, and demonstration of readiness for operation as appropriate (but exclusive of Punch List Items, final vendor reports, manuals, and other information not necessary for start-up), Contractor shall notify the Owner Representative, in writing, that the System is ready for turnover to Owner, which notice must be accompanied by the applicable System Turnover Package meeting the requirements of this Agreement.

6.2.2 Turnover Acknowledgment. Owner will agree that the System is ready for turnover in writing ("**Turnover Acknowledgment**") within seven (7) Days of receipt by Owner Representative of notification from Contractor (the "**Owner Review Period**"), unless Owner reasonably believes that: (i) the System or the System Turnover Package does not comply with the requirements of this Agreement or (ii) the System: (a) contains Defects that preclude safe testing, safe commissioning, or safe operation; (b) has not been prepared, flushed, and/or cleaned as necessary or appropriate; (c) requires Work which has not been completed and which does not constitute a Punch List Item; or (d) materially differs from the System required under this Agreement. Owner and Contractor must develop and maintain a Punch List of all known Defects with respect to the System submitted for Turnover Acknowledgment. Notwithstanding the foregoing, if the turnover of a System by Contractor is not made in accordance with the agreed upon turnover schedule and as a result Owner is unable to accept or reject such System within the Owner Review Period, Owner and Contractor will mutually agree upon a reasonable extension of the Owner Review Period for the affected Systems, which extension will reflect the nature of the affected System. Turnover Acknowledgment and the provision of operating personnel neither constitutes acceptance of any System, Owner's acceptance of care, custody, or control of such System, nor any transfer of care, custody or control to Owner, including responsibility for commissioning, start-up, testing, operations, or maintenance.

6.2.3 Deficiencies. If Owner reasonably believes that any of the circumstances set forth in clauses (i) and (ii) of Section 6.2.2 exist with respect to a System submitted for Turnover Acknowledgment, Owner will so notify Contractor in writing during the Owner Review Period, stating the Defects or the incomplete items of Work noticed by Owner, as applicable. When Contractor deems it has remedied such Defects, Contractor will then again notify Owner Representative as provided in Section 6.2.1. This procedure will be repeated until Owner issues the Turnover Acknowledgment for such System. Nothing contained in this Section 6.2 diminishes Contractor's obligation to remedy and correct all Defects or Punch List Items regardless of whether they are discovered and/or placed on a

Punch List and/or Contractor gets notice of them before, during or after the Owner Review Period or Turnover Acknowledgment of any System.

6.3 Tie-in and Mechanical Completion.

6.3.1 Sequence. Contractor shall not commence making any Tie-in of a Subproject until (i) Contractor has completed the Marshaling Requirement; (ii) the Subproject is otherwise ready to commence commissioning (except for Work required to be performed as part of the Tie-in); and (iii) Owner has given Contractor its consent to commence the portion of the Work necessary to complete the Tie-in. Contractor will then perform the Tie-in of that Subproject.

6.3.2 Achievement. Contractor shall achieve each of the Tie-ins of a Subproject required to be performed during an outage prior to the applicable Contractor Outage End Time.

6.3.3 Tie-in. If timely completion of the Marshaling Requirement by Contractor for a Tie-in is in jeopardy in the reasonable judgment of Contractor or Owner, Contractor shall promptly prepare and implement, in good faith, a detailed recovery plan such that the performance of the Work can progress in accordance with the Marshaling Requirements, the Scheduled Tie-in Outage Periods, and the Major Contract Milestones. Owner is obligated to issue a Certificate of Tie-in within five (5) Days of its receipt of Contractor's notice of the completion of a Tie-in if Contractor has satisfied the requirements of Tie-in, as more particularly specified in **Exhibit A**. If Contractor fails to complete a Subsystem Tie-in within the Scheduled Tie-in Outage Period and the affected Unit cannot be placed in service and operate as a consequence of Contractor's failure to complete the Tie-in, liquidated damages will be assessed against Contractor, which liquidated damages will be calculated as if they had been incurred under **Exhibit L** as if each Hour, or part thereof (without proration), from and after the first Hour following the Scheduled Tie-in Outage Period until the Hour that the Subsystem Tie-in has been completed were a Unit Outage Hour for each Unit affected. Contractor's Tie-in Work must, however, be coordinated with the work to be performed by Owner during such outage. If Contractor requires additional time to complete the Tie-in Work and requires that the Unit be out of service in order to complete such Tie-in Work, at Contractor's request, Owner will schedule the required number of Days for Contractor to complete the Work and Contractor will be assessed liquidated damages for each such Hour (as if each such Hour on each affected Unit were a Unit Outage Hour) because actual damages would be extremely difficult and impractical to ascertain and fix, as if such liquidated damages were incurred under **Exhibit L**. Contractor may not commence Work to accomplish Tie-in unless the following requirements (the "**Marshaling Requirement**") are met: (i) at least thirty (30) Days prior to the commencement of the outage during which such Work will be performed, all Equipment, Consumables, and Construction Aids necessary for the performance of such Work, shall be fully marshaled and present at the Job Site and (ii) prior to the commencement of the outage during which such Work will be performed, (a) its and Subcontractors' workforces necessary for the performance of such Work, shall be fully marshaled and present at the Job Site and (b) all Work necessary to be performed with respect to the Tie-in (other than Work required to be performed during the Tie-in) shall

have been performed. If Contractor has not met the Marshaling Requirement or is otherwise unprepared to effect Tie-in during the Scheduled Tie-in Outage Period and the Unit must subsequently be removed from service to allow Contractor to effect Tie-in, Contractor may request such additional outage time pursuant to **Section 6.12**. Contractor will withdraw from the Unit no later than the Contractor Outage End Time. Contractor is obligated to achieve the Tie-in notwithstanding the occurrence of an event of Force Majeure (other than an event of Force Majeure occurring after it has met the Marshaling Requirement) and without adjustment of the terms of this Agreement on account thereof. Contractor recognizes that the date of the Scheduled Tie-in Outage Period is not subject to change except in Owner's sole discretion.

6.3.4 Mechanical Completion. If timely achievement of Mechanical Completion is in jeopardy in the reasonable judgment of Contractor or Owner or if it is not timely achieved, Contractor shall promptly prepare and implement, in good faith, a detailed recovery plan and accelerate the Work such that the performance of the Work can progress in accordance with the Major Contract Milestones. Within seven (7) Days after receipt by Owner of written notice from Contractor certifying that Contractor has satisfied the requirements for Mechanical Completion (other than issuance of the Certificate therefor by Owner), Owner shall determine whether the applicable requirements have been achieved and shall either issue the Certificate of Mechanical Completion or give notice to Contractor in writing of Defects in the Work (other than Punch List Items), of which Owner then has knowledge. Owner is obligated to issue the Certificate of Mechanical Completion within such seven (7) Day period if Contractor has satisfied the requirements of Mechanical Completion (other than issuance of the Certificate therefor by Owner). Upon receipt of a written notice of the reasons why Contractor has not achieved Mechanical Completion from Owner, Contractor shall promptly perform corrective measures to eliminate any Defect in the Work and shall thereafter provide another written notice to Owner containing the applicable certification set forth above. Owner shall, within seven (7) Business Days after receipt of such written notice, and after each subsequent written notice as may be required, determine whether the applicable requirements have been achieved and either issue the Certificate of Mechanical Completion or advise Contractor of any Defects (other than Punch List Items) remaining in the Work that prevent achievement of Mechanical Completion. Nothing contained in this **Section 6.3** diminishes Contractor's obligation to remedy and correct all Defects, including Punch List Items, regardless of whether they are discovered and/or placed on a Punch List and/or Contractor gets notice of them before, during or after achievement of Mechanical Completion.

6.4 Project Schedule Update. Without altering, revising, or otherwise changing any Major Contract Milestone, unless adjusted in accordance with **Articles 9 and 10**, Contractor shall, on a Monthly basis at the time the status report is submitted pursuant to **Section 4.23.1** update the Project Schedule in native format (electronic) resource loaded and showing critical path activities interconnected by schedule logistics, in substantially the format and meeting the requirements set forth in **Exhibit A**. Contractor shall also submit a hard copy of the Project Schedule (at an agreed level of detail) to Owner for Owner's review and comment. The Project Schedule provided to Owner must be the same schedule Contractor actually uses to schedule and manage the Work.



6.5 Availability of Information. Owner is entitled to, and Contractor shall provide, the same level of information and detail as Contractor has available to verify the accuracy of Contractor's Claims for relief related to any Excusable Event Basis or other Changes pursuant to **Articles 9 and 10**.

6.6 Performance Guarantee Testing.

6.6.1 Sequence. If as a practical matter a Subproject cannot properly have its Performance Guarantees tested without the performance of another Subproject (e.g., the pipe conveyor cannot be tested without CCR to be provided by one or a combination of other Subprojects), the Performance Guarantee Tests for such Subproject may not take place until such other Subproject has achieved Mechanical Completion and Tie-in and is also ready for the performance of Performance Guarantee Tests.

6.6.2 Contractor Notice. At such time as Mechanical Completion and all Tie-ins have been achieved and Contractor believes that a Subproject is ready for the performance of the Performance Guarantee Tests, Contractor shall so notify Owner in writing of the date on which it desires to have the Performance Guarantee Tests conducted, which date must not be earlier than five (5) Days following Owner's receipt of such notice. Contractor will be entitled to reschedule commencement of the Performance Guarantee Tests on no less than three (3) Days' notice to Owner.

6.6.3 Performance Guarantee Tests. Performance Guarantee Tests shall be scheduled with due regard for minimizing the operating expenses of and maximizing revenues to be derived from Unit operations during such tests. The Performance Guarantee Tests must be conducted by a Third Party contractor as required by **Exhibit G** and passed simultaneously while the Units and Yard Systems, as improved by the Subproject, are in compliance with the terms of this Agreement and producing CCR at or near their maximum rates (the Performance Guarantee Tests will utilize additional CCR held in the Existing Facility and/or stored in the Facility to achieve the design limits for the Facility as set forth in this Agreement). Such tests must be conducted: (i) in the presence of Owner; (ii) in accordance with **Section 5.9, Section 6.6 and Article 11**; and (iii) in accordance with the requirements of **Exhibit G** and the Performance Guarantee Test Procedures.

6.6.4 Equipment. No auxiliary, standby, temporary, or spare equipment (whether or not constituting Equipment) may be used during the performance of the Performance Guarantee Tests, unless otherwise approved in writing by Owner. All Equipment and Systems of the Subproject must be operational.

6.6.5 Testing. Contractor's directions issued to Owner pursuant to **Section 5.9** must be consistent with Prudent Utility Practices and Applicable Law, including operation of all Systems and Equipment of the Subproject within the manufacturers' specifications, recommendations, and warranty requirements, without over-stressing or over-pressurizing any such systems. Test technicians collecting data and providing other testing-related services may not operate any Equipment during any Performance Guarantee Test.

6.6.6 **Retesting.** If Contractor fails to pass the Commercial Operation Test or Extra Tests, the Defects which so prevent performing such tests successfully must be immediately thereafter corrected or remedied in accordance with **Section 12.1**. Upon completion of such corrective or remedial actions, Contractor may cause the Commercial Operation Test or Extra Tests to be re-performed upon not less than forty-eight (48) Hours' prior written notice to Owner. The Commercial Operation Test or Extra Tests will be repeated until the Performance Guarantees (other than Guaranteed Availability) have been achieved (or, for Buydown Performance Guarantees, all applicable liquidated damages have been paid) by Contractor but will in no way excuse Contractor from the timely achievement of the Guaranteed Commercial Operation Date and the Guaranteed Final Completion Date. The results of all inspections and tests will be provided to Owner together with gross and reduced data and other information reasonably requested by Owner. The Commercial Operation Test or Extra Tests will be conducted in accordance with this **Section 6.6**, **Section 5.9**, **Article 11**, and **Exhibit G** for the purpose of demonstrating the achievement of Commercial Operation or Final Completion, as the case may be.

6.7 Re-Setting of Subproject. During those periods after each Performance Guarantee Test, Contractor shall perform whatever Work is necessary, including re-setting of Equipment and repairs of damage or modifications caused by testing, to return the Subproject or relevant portion thereof to the normal operating control settings and configurations; **provided, however**, Contractor is not entitled to require that the Unit be taken out of service or operate on a restricted basis.

6.8 Commercial Operation; Substantial Completion. For each Subproject Contractor shall successfully achieve Commercial Operation and Substantial Completion on or before the applicable Guaranteed Commercial Operation Date and Guaranteed Substantial Completion Date. At such time as Contractor, in good faith, believes that it has completed the requirements necessary for the achievement of Commercial Operation or Substantial Completion including (except with respect to Substantial Completion) the passage of the Commercial Operation Test required therefor, it shall give written notice of its belief to Owner. Such notice for Commercial Operation shall include a preliminary Commercial Operation Test report providing a summary of the Commercial Operation Test on which it is based and including all raw data taken during such Commercial Operation Test. A final Commercial Operation Test report must be delivered to Owner within twenty-one (21) Days of the conclusion of such tests and such report will otherwise be in accordance with **Exhibit G**. Contractor shall include sufficient results of testing in the preliminary Commercial Operation Test report to allow Owner to reasonably determine that there is a high probability that the final Commercial Operation Test results will confirm that the applicable conditions of Commercial Operation have been achieved. As soon as practicable, but in any event within ten (10) Business Days after receipt of the final Commercial Operation Test report by Owner (or for Substantial Completion, within ten (10) Business Days of Contractor's notice), Owner shall either issue the Certificate of Commercial Operation (or for Substantial Completion, the Certificate of Substantial Completion) or reject Contractor's notice, in which case it shall state its reasons for rejection. Such procedure shall be repeated until Contractor has fulfilled the requirements necessary to achieve Commercial Operation or Substantial Completion, as applicable (including submitting (i) a new notice after each time additional Work is performed to achieve Commercial Operation or Substantial

Completion) and (ii) for Commercial Operation, a final Commercial Operation Test report demonstrating that Contractor has fulfilled the requirements necessary to achieve Commercial Operation).

6.9 Possession and Control. Upon passage of care, custody, and control of a Subproject in accordance with **Section 22.3**, Contractor (and Subcontractors) will have reasonable access to the Subproject to complete any Work still remaining to be performed hereunder; **provided, however**, Contractor will be required to complete any and all such Work in a manner consistent with the operational requirements of the Units (as improved by the Subproject) as directed by Owner. In no event will Owner be required to take any of the Units out of service or otherwise adversely affect any of the Units' operations.

6.10 Final Completion. Contractor shall successfully perform all of the Work and obligations (except obligations requiring future performance, *e.g.*, warranty, indemnification, and Guaranteed Availability obligations) and shall achieve Final Completion (other than issuance of the Certificate of Final Completion by Owner) for each Subproject on or before the applicable Guaranteed Final Completion Date. At such time as Contractor, in good faith, believes that the requirements of Final Completion have been met, Contractor shall give notice to Owner, together with reasonable substantiating documentation thereof, including all gross and reduced data from Performance Guarantee Tests conducted by Contractor. Final laboratory results are not required to be provided with such notice. Within ten (10) Days after receipt by Owner of such notice from Contractor, Owner will determine whether the requirements of Final Completion have been achieved, subject to confirmation by reference to the final laboratory results. If Owner agrees with Contractor's notice, upon receipt of final laboratory results that confirm that Final Completion has been achieved, Owner, within the later of ten (10) Days after receipt by Owner of receipt of Contractor's notice or five (5) Business Days of such final laboratory results, shall issue the Certificate of Final Completion. If, however, Owner believes that Final Completion has not been achieved, Owner shall give notice to Contractor to that effect, with reasons for such belief, within the above period and, upon receipt of such notice from Owner, Contractor shall promptly take corrective action to fulfill the requirements of Final Completion. Contractor shall thereafter provide another notice to Owner when it believes that Final Completion has been achieved (other than issuance of the Certificate of Final Completion by Owner) and the above-described procedures will be repeated until Final Completion is achieved. Nothing in this **Section 6.10** shall relieve Contractor of its obligation to achieve Final Completion by the Guaranteed Final Completion Date.

6.11 Maintenance Outage. Owner will inform Contractor as soon as practical if a maintenance outage is scheduled for the Unit. With Owner's permission, Contractor may use the period established by Owner for such maintenance outage to perform Work, including Work required to achieve Tie-in. Owner may change the schedule for commencement of a maintenance outage without notice. If Contractor causes Owner to extend a maintenance outage beyond the scheduled duration, then each Hour of each affected Unit of such extension will constitute a Unit Outage Hour and Contractor shall compensate Owner for any such extension at the rate established for liquidated damages pursuant to **Exhibit L**.

6.12 Contractor Requested Outage. In addition to the applicable Scheduled Tie-in Outage Period, Contractor may request permission to perform Work during a forced or Owner

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scheduled outage of the Unit. If the Unit experiences a forced or Owner scheduled outage (other than the Scheduled Tie-in Outage Period), Contractor may give Notice that it wishes to use a portion of such outage to perform Work. Owner, to the extent practicable, will specify the dates, times, and restrictions on Contractor's access to the Unit for the performance of such Work. Contractor may also request additional outage time be scheduled to perform Work. Owner may in its sole discretion grant such request. Owner will specify in writing the dates, times, and restrictions on Contractor's access prior to such additional outage time. Owner has the additional right to change the dates and times of such outage or during which Contractor will have such access. If (i) Contractor's request for additional outage time cannot be accommodated during a scheduled or forced outage and the Unit must be taken out of service or operated on a restricted basis or (ii) Contractor fails to properly withdraw from the outage under this **Section 6.12** by the Contractor Outage End Time, as applicable, then, because actual damages would be extremely difficult and impracticable to ascertain and fix, liquidated damages for each Hour of each affected Unit of such additional time or delay will be assessed as Unit Outage Hours under **Exhibit L**.

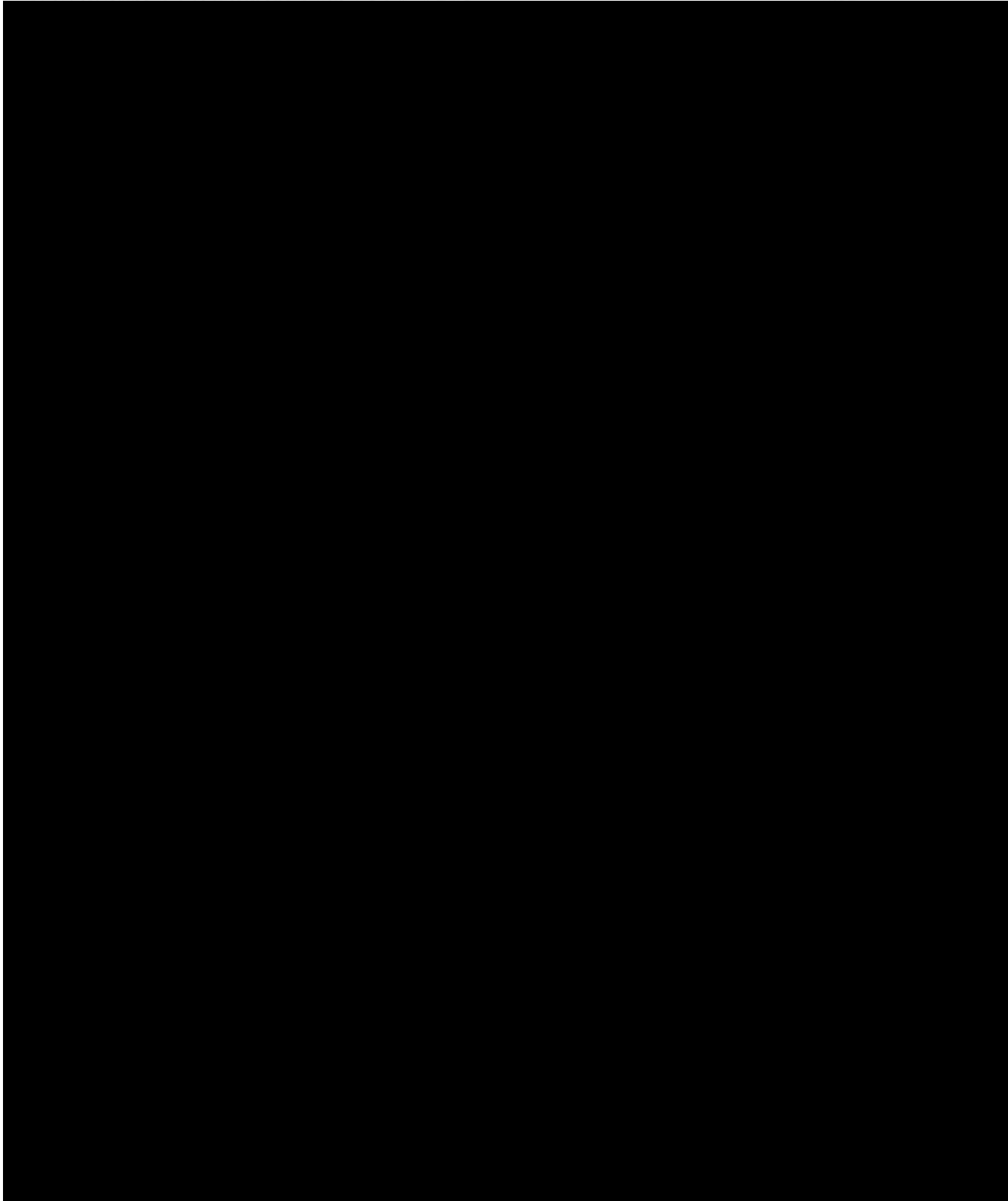
6.13 Results of Extra Tests. Contractor is entitled to arrange for one or more Extra Tests to be conducted, at its expense, following Commercial Operation to demonstrate improved performance with respect to a Buydown Performance Guarantee. If any such Extra Test does establish performance levels that differ from the performance levels on which Commercial Operation was based, Owner shall recalculate the amount of Buydown Liquidated Damages due therefor, if any, based on the final results of such Extra Test and any difference from the amount determined upon Commercial Operation shall be paid to the applicable Party within fifteen (15) Business Days after such recalculation.

6.14 Subprojects. All of the Subprojects collectively shall constitute the entire Facility and Work. If any portion of the Facility or Work is not explicitly designated as being included in any particular Subproject, it shall be deemed to be included in the Subproject for which it is most essential. If any Components, Systems, or other portions of the Work are necessary for the safe and proper operation or testing of more than one Subproject, none of such Subprojects may reach Tie-in, Mechanical Completion, Commercial Operation, or Final Completion unless and until such Components, Systems, or other portions of the Work are properly completed.

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ARTICLE 8

CONTRACTOR'S COMPENSATION

8.1 Contract Price. Owner shall pay Contractor for the due, proper, and complete performance of the Work as required hereunder and for the due performance of all other obligations and duties imposed upon Contractor pursuant to this Agreement an amount equal to

[REDACTED] The Contract Price shall only be adjusted, (i) in accordance with **Exhibit O** with respect to any Options exercised by Owner and (ii) with respect to Change Orders and Excusable Events pursuant to **Articles 9** or **10**. Contractor shall receive the Contract Price as full compensation for the performance of the Work and its other obligations hereunder whether or not Contractor has properly estimated or anticipated the costs required to fully perform its obligations under this Agreement.

8.2 Taxes.

8.2.1 Tax Cooperation and Information. Contractor shall pay all payroll and other related employment compensation taxes for Contractor's employees; federal, state and other taxes that may be assessed on Contractor's net income, net worth, license, privilege, or gross receipts (other than taxes that are designated as sales or use taxes) arising from this Agreement; taxes, duties, excise fees, and other costs associated with the importation or exportation of Equipment, Consumables, Construction Aids, or services; other fees, royalties and assessments of any nature in connection with the Work, contributions and taxes for which Contractor is liable under **Sections 8.2.3** and **8.2.6**, and engineering and business license costs (collectively, the "**Contractor Taxes**"). Sales or use taxes required under Applicable Laws to be (i) collected by Contractor from Owner, or (ii) paid by Contractor or any Subcontractor (and for which no exemption is available) in connection with purchases or sales of Equipment or Consumables required for performance of the Work, (collectively "**Sales Taxes**") including sales or use taxes on Equipment and Consumables provided by Contractor, shall be administered by Contractor in accordance with **Sections 8.2.4** and **8.2.6**. The Contract Price includes Contractor Taxes and excludes Sales Taxes (other than those included in Contractor Taxes). Contractor shall be reimbursed for the full amount of Sales Taxes (other than those included in Contractor Taxes) properly paid by Contractor or Subcontractors in accordance with this Agreement on a Monthly basis at the time Contractor receives payments pursuant to **Section 8.5**, subject to the documentation requirements of **Section 8.6**.

8.2.2 Subcontractors. Owner will not have any responsibility whatsoever with respect to taxes assessed against, paid, or deemed to be paid by Subcontractors.

8.2.3 Taxes Related to Employment of Persons. Contractor accepts full and exclusive liability for the payment of any and all contributions, taxes or assessments that are measured by wages, salaries, or other remunerations paid to Persons employed by Contractor or Subcontractors for the Work, or which arise by virtue of their employment, and which now or hereafter are imposed by any Governmental Authority. Such contributions or taxes shall include those for unemployment insurance, social security

insurance, workers' compensation, old age retirement benefits and other payroll taxes of any kind. Contractor shall comply with Applicable Law relating to such subjects and shall fully reimburse Owner for any of such taxes or contributions that Owner may be required to pay.

8.2.4 Sales and Use Taxes. Certain items of Equipment and Consumables purchased in the performance of the Work may be exempt from Sales Taxes in accordance with KRS 139.470 and KRS 139.480 and any successor provisions or similar provisions. Owner is responsible for notifying Contractor in a timely manner as to the nature of items that are exempt from Sales Taxes and, upon Contractor's request, Owner will promptly provide Contractor with tax exemption certificates which, when properly utilized by Contractor, will allow Contractor to purchase such items from Subcontractors without payment of Sales Taxes. Contractor shall present such certificate to the Subcontractor on a timely basis as needed to qualify for the applicable exemption.

8.2.5 Indemnity and Assessment. Owner shall defend and indemnify and hold Contractor harmless from and against any and all Claims for, and resulting liability for Sales Taxes and related penalties and interest, and any dispute resolution costs and attorneys' fees that may be asserted on all items which Contractor purchased under resale or other exemption certificates provided by Owner and for which Sales Taxes are later assessed by Governmental Authorities; **provided**, that any resulting liability is not caused by the act or omission of Contractor. With Contractor's consent, Owner, at its own expense, will have the right to direct the basis on which any tax assessment will be paid or contested and to control any contest leading to the settlement of assessed taxes. Notwithstanding anything to the contrary herein, Owner retains the right to choose the attorneys who will represent Contractor or Owner's interests regarding any tax assessments and/or litigation. Contractor shall cooperate with Owner in connection with any audit or contest.

8.2.6 Other Taxes. Contractor shall be responsible for any taxes on Construction Aids used in the performance of the Work. Owner shall be responsible for property taxes, if any, on Equipment and Consumables purchased by Contractor on behalf of Owner from and after delivery to the Job Site.

8.2.7 Tax and Accounting Information. Contractor shall provide assistance as reasonably requested by Owner or its tax consultant(s), in confirming eligibility and qualification for exemptions from Sales Taxes (and any other exemptions, deductions, credits and the like) to the relevant Governmental Authorities. From time to time during the term of this Agreement and within thirty (30) Days of a request therefor, Contractor shall provide Owner with information, including regarding quantities, descriptions, costs, and allocations of property acquired in connection with the Work as reasonably requested by Owner in connection with the preparation of Owner's tax returns, Owner's defense of its tax treatment of such items, for the purpose of satisfying regulatory requirements or as otherwise required in connection with calculating, obtaining exemption from, or rebate of, Sales Tax. Contractor agrees to participate in any Sales Taxes exemption or other exemption or rebate programs identified by Owner, to complete and deliver the applicable

documentation to obtain tax-exemption for purchases made by Contractor, including for Equipment, and to pass any Sales Tax savings or rebates through to Owner.

8.3 Progress Payments. Owner shall pay Contractor for the Work in Monthly installments based upon the full and verified completion of milestones in accordance with **Exhibit C**, not to exceed the applicable maximum Monthly amounts set forth in **Exhibit C** for each Month. If there is a change to the Contract Price or Major Contract Milestones pursuant to **Articles 9 and 10**, the Parties will equitably adjust **Exhibit C** as may be appropriate. In addition to milestone payments, Applications for Payment shall include all amounts due Contractor for any Work performed by Contractor for which under this Agreement Contractor is entitled to compensation on a time and material or similar basis of compensation. For purposes of determining Contractor’s compensation for such Work, Contractor’s cost shall be net of Applicable Credits. The term “**Applicable Credits**” means any and all refunds, rebates, credits, discounts, or similar amounts whether based on quantity, volume, or any other factor, (including any interest thereon) received by Contractor or to which Contractor is or will be entitled in connection with its performance of the Work.

8.4 Application for Payment. On or before the tenth (10th) Day of each Month, Contractor shall furnish Owner with an Application for Payment for (i) amounts that have come due under this Agreement for Work completed through the last Day of the previous Month, accompanied by the items required by **Section 8.6** and (ii) other amounts that have come due under this Agreement, accompanied by substantiating data. Each Application for Payment submitted by Contractor that seeks payment for Work involving the removal, alteration, or destruction of any portion of the Existing Facilities, including any of the Units, must separately identify: (i) Unit involved, (ii) the removal, alteration, or destruction Work performed, and (iii) the portion of the Contract Price associated with such removal, alteration, or destruction. Applications for Payment shall be furnished to Owner as follows (or as Owner otherwise designates from time to time by written notice to Contractor):

Original: Louisville Gas and Electric Company
820 W. Broadway
Louisville, KY 40202
Attn: Dianne Ware

Copy: Louisville Gas and Electric Company
820 W. Broadway
Louisville, KY 40202
Attn: Joan Lipp



8.5 Payment of Substantiated Amount. Owner shall pay Contractor the amount of each Application for Payment which has been substantiated by Owner, less amounts properly withheld hereunder. Owner shall make such payment within thirty (30) Days after receipt of the complete Application for Payment, subject to the provisions of this **Article 8**. If Owner fails to make a payment in respect of a substantiated Application for Payment when due or improperly withholds amounts due to Contractor, interest will accrue on such overdue amounts at the Agreed Rate from the date such amount was due to have been paid to and until (but not including) the date it is paid. Contractor understands and agrees that Owner's payment determination under this **Article 8** may be made in conjunction with the Financing Parties and that approval of the Financing Parties may be required prior to making payment in accordance with this **Article 8**, subject to payment being due within thirty (30) Days after receipt of the completed Application for Payment. Payments made to Contractor in respect of Work performed by Subcontractors constitute trust funds for such Subcontractors and shall not be commingled by Contractor with other funds of Contractor or its Affiliates.

8.6 Supporting Documentation. Each Application for Payment submitted by Contractor must be accompanied by the following, all in form and substance satisfactory to Owner:

- (i) a duly executed or acknowledged Contractor's certification stating that: (a) all Subcontractors have been paid amounts properly due under their respective Subcontracts and identifying all Major Subcontractors with whom Contractor has entered into Subcontracts; (b) the applicable Work has been performed in accordance with and complies with this Agreement; (c) it has reviewed all financial information contained in the Application for Payment and it is true, correct and complete; (d) no Liens or Claims have been filed or commenced in connection with the Work, and (e) no Excusable Event Basis has occurred since the previous Application for Payment;
- (ii) a detailed description of the Work performed during the period as to which the Application for Payment relates; photographic and other documentation of the status and completion of the Work; reasonable documentation demonstrating achievement of milestones and otherwise demonstrating the earned value of the Work; for any Work performed by Contractor for which under this Agreement Adjustments to the Contract Price and/or Major Contract Milestones are to be made but Contractor and Owner have not agreed to both a lump sum Contract Price Adjustment and a fixed Major Contract Milestone Adjustment, Contractor shall submit to Owner a detailed breakdown in a form reasonably acceptable to Owner substantiating the (a) Amount of such Adjustments with respect to the applicable Work performed (or eliminated) during the Month and (b) any amount due with respect thereto;
- (iii) duly executed partial or final lien waivers, as appropriate, in the forms set forth in **Exhibit F-5** from Contractor and from all Major Subcontractors that are to receive payment. The final Application for Payment must be accompanied by final and full waivers of Claims and Liens from Contractor and, to the extent not previously



provided, Major Subcontractors entitled to receive payment in connection with the performance of the Work, each in the forms set forth in **Exhibit F-5**;

- (iv) a copy of the status report pursuant to **Section 4.23.1** for the Month covered by the Application for Payment;
- (v) a copy of all invoices pursuant to which Contractor has paid Sales Taxes for which it seeks reimbursement; and
- (vi) such other information, documents, and other materials: (a) reasonably requested by Owner or required by this Agreement or (b) as may be required by the laws or customs of the jurisdiction in which the Job Site is located in order to protect the owners of the Trimble County Generating Station Site from Liens or Liabilities.

8.7 Accrual Notification. For Owner’s accounting purposes only, by 12:00 PM (Louisville, Kentucky time) on the last Business Day of each Month Contractor shall e-mail Owner (i) a list of all Work (e.g., milestones) that has or will be completed that Month for which Contractor will be entitled to submit an Application for Payment the next Month and the amounts that will become due with respect thereto and (ii) such other information that Owner may reasonably request. The email shall be sent to:

Janna Singleton
LG&E and KU Services Company
Project Engineering
820 West Broadway
Louisville, KY 40202
janna.singleton@lge-ku.com

with a copy to:

Joan Lipp
LG&E and KU Services Company
Project Engineering
820 West Broadway
Louisville, KY 40202
joan.lipp@lge-ku.com

8.8 Withholding to Protect Owner from Loss. Owner may, without prejudice to other rights of Owner hereunder, withhold payment on an Application for Payment or any other amount due to Contractor or a portion thereof (or use or draw upon the Contract Security) to the extent such payment is disputed by Owner or because of:

- (i) Contractor’s failure to carry out the Work in accordance with this Agreement or any material breach of this Agreement;
- (ii) other amounts due to Owner from Contractor, including liquidated damages then due and owing;

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- (iii) the existence of any Defect not yet corrected by Contractor whether or not payment for such Work pursuant to **Section 8.5** has been previously made. Contractor may include such amounts withheld in the next regular Application for Payment made after correction or completion of such Work;
- (iv) an amount equal to [REDACTED] of the cost for a Third Party to complete outstanding Punch List Items. Amounts withheld for completion of Punch List Items may be included by Contractor in the Application for Payment immediately following satisfactory completion of such Punch List Items; or
- (v) Liens filed or Claims commenced by any Person that has performed a portion of the Work unless Contractor has furnished an acceptable bond in an amount equal to [REDACTED] of the amount of such Lien or Claim to protect Owner against such Liens and/or Claims; or
- (vi) the failure of Contractor to properly maintain the Performance Securities (see **Section 8.12.1**).

8.9 Final Payment.

8.9.1 Reconciliation. As a condition of final payment hereunder with respect to each Subproject, Contractor shall have submitted a statement summarizing and reconciling with respect to each Subproject all previous Applications for Payment, payments by Owner, and Change Orders, adjustments on account of Excusable Events, and the status of Contract Security. Subject to the provisions of this Agreement, within thirty (30) Days of the receipt of such statement, Owner shall pay Contractor all remaining amounts due with respect to that Subproject. Notwithstanding anything to the contrary contained herein, the final payment will not become due and payable until: (i) a Certificate of Final Completion has been executed by Owner; (ii) Owner has received all Subcontractor warranties, Operating and Maintenance Manuals, electrical drawings and schematic diagrams, Design Documents, performance testing data, As-Built Drawings and such other items as are required by this Agreement; (iii) all certificates of occupancy, Permits, or other approvals required of Contractor have been submitted to Owner; and (iv) the conditions of **Section 8.9.2** and **8.9.3** have been properly completed. The making of final payment constitutes a waiver by Contractor of all Claims against Owner (and its property, including the Facility) with respect to the Subproject not previously made in writing by Contractor. Owner shall make final payment to Contractor within thirty (30) Days after the date that all of the preceding matters have been completed or have otherwise occurred.

8.9.2 Release. As a condition of final payment for each Subproject, Contractor shall submit to Owner a general release and an affidavit, in form and substance satisfactory to Owner, that releases all Claims of Contractor under the Agreement and represents that all indebtedness connected with the Work for which Owner or its property might in any way be responsible has been paid, waived or otherwise satisfied; but if any such indebtedness has not been satisfied, Contractor may satisfy this obligation if it furnishes a



bond reasonably satisfactory to Owner to indemnify Owner against any such item of responsibility or obligation.

8.9.3 Satisfaction of Obligation. Notwithstanding any provision to the contrary in this Agreement, Owner and Contractor acknowledge and agree that Contractor will not be entitled to final payment of the Contract Price unless and until Contractor has achieved Final Completion for that Subproject.

8.10 Disputed Applications for Payment. If there is any Dispute about any amount which is requested by Contractor or which is claimed by Owner to be due and payable by Contractor, the amount not in dispute will be promptly paid in accordance with the provisions hereof, and any deduction of a disputed amount which is not specifically agreed to by Contractor or Owner, as applicable, and which is then determined by litigation or by mutual agreement, to have been improperly withheld will be promptly paid by Owner or Contractor, as applicable, together with interest from the date such amount otherwise would have been payable to the date of payment at the Agreed Rate.

8.11 Payment of Subcontractors. Contractor shall promptly pay each Subcontractor when due the amount to which such Subcontractor is entitled. Contractor shall, by an appropriate agreement with each Subcontractor, require each Subcontractor to make payments to its sub-subcontractors on the same basis. Owner has no obligation to pay or to see to the payment of any monies to any Subcontractor except as may otherwise be required by Applicable Law, in which event Contractor shall immediately reimburse Owner therefor, with interest thereon at the Agreed Rate. Owner shall also be entitled to exercise its rights under **Section 5.4** or **Section 8.12.1** on account thereof. Upon reasonable prior notice, Owner reserves the right to make payments due hereunder directly to Subcontractors from and after such time as Contractor (i) fails to make any payment to a Subcontractor that is properly due or (ii) upon Owner's request, fails to provide adequate assurances that Contractor's financial condition is sufficient to continue to pay such amounts as and when they become due without financial risk to Owner. The amount of any such payment made by Owner directly to Subcontractors shall be reimbursed by Contractor or, at Owner's option, it may be credited against any payments otherwise due from Owner to Contractor or deducted from the Contract Security.

8.12 Security for Contractor's Obligations.

8.12.1 Security. Without limiting Owner's other rights under this Agreement, as security for the full and faithful performance of the Work and the other obligations of Contractor under this Agreement, Contractor shall deliver the Performance Securities to Owner on or before the thirtieth (30th) Day following the Effective Date. Notwithstanding any other provision of this Agreement to the contrary, Owner will not be obligated to make any payment of the Contract Price to Contractor until Contractor has delivered the Performance Securities and the Parent Guaranty to Owner. Throughout the period until each Performance Security is released and returned by Owner pursuant to **Section 8.13**, Contractor shall maintain it so that (i) it is full force and effect and of the proper amount, (ii) it remains an Acceptable Letter of Credit, and (iii) there are at least thirty (30) Days remaining prior to its stated expiration date. If from time to time Contractor fails to so maintain one or more of the Performance Securities, Owner will be entitled to (i) draw on

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such Performance Securities and hold the proceeds thereof as cash Contract Security and (ii) withhold amounts required to be paid to Contractor pursuant to the terms of this Agreement (and to hold such withheld amounts as cash Contract Security) in an amount that, together with undrawn amounts of the Performance Securities then being properly maintained by Contractor and any cash Contract Security then being held by Owner, will not exceed the Required Contract Security.

8.12.2 Enforcement. Owner shall be entitled to use or draw on the Contract Security (i) upon the occurrence of any Contractor Default; (ii) to the extent Contractor fails to pay any amount then due and owing to Owner; (iii) in lieu of withholding amounts it is entitled to withhold hereunder; and/or (iv) as otherwise permitted by the terms of this Agreement or the terms of a Performance Security. If any amount is withdrawn from any of the Performance Securities and thereafter is found to have been improperly withdrawn, such amount shall be repaid together with interest thereon at the Agreed Rate calculated from and including the date of withdrawal to and until, but not including, the date of payment (or any earlier date on which payment is proffered) in exchange for delivery of evidence that such Performance Security has been restored to the proper amount. A draw on any of the Performance Securities shall be made on the signature of one authorized representative of the Owner.

8.13 **Release of Contract Security**. After the occurrence of the following events, Contractor may request by written notice that the corresponding Performance Security (and/or the applicable cash Contract Security) be released and returned to Contractor:

- (i) Achievement of Commercial Operation by the last Subproject to achieve Commercial Operation: Phase One Performance Security;
- (ii) Achievement of Final Completion by the last Subproject to achieve Final Completion: Phase Two Performance Security;
- (iii) Expiration of the last of the Warranty Periods to expire: Phase Three Performance Security.

Each such notice must also certify that the Contract Security Release Conditions have been met. Within ten (10) Days following Contractor's request, Owner shall determine whether the Contract Security Release Conditions have been met, and if so, approve such request. Upon approval, Owner will promptly release and return to Contractor the applicable Contract Security. Notwithstanding the foregoing,

- (a) Upon achievement of Commercial Operation by all Subprojects other than the Transport Subproject, the Phase One Performance Security may be reduced to [REDACTED]
- (b) Upon achievement of Final Completion by all Subprojects other than the Transport Subproject, the Phase Two Performance Security may be reduced

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to [REDACTED];

- (c) Upon expiration of the last of the Warranty Periods to expire other than that for the Transport Subproject, the Phase Three Performance Security may be reduced to [REDACTED]

To affect the above reductions, Contractor shall provide a replacement Acceptable Letter of Credit (or equal cash Contract Security) in the amount set forth in (a), (b), or (c), as applicable, and Owner will return to Contractor the replaced letter of credit.

8.14 Overpayment Any overpayment by Owner to Contractor shall be deemed to be a mistake of fact and promptly repaid to Owner upon demand within five (5) Days.

8.15 Tax and Accounting Information. Contractor shall provide tax and accounting information for each Subproject reasonably requested by Owner with respect to the Work and Equipment, including information required for submission to Governmental Authorities, cost breakdowns of the Contract Price in accordance with **Exhibit W**, and the other systems of accounts provided by Owner.

ARTICLE 9

EXCUSABLE EVENTS AND OWNER-INITIATED CHANGES

9.1 Excusable Events.

9.1.1 Notice. This **Section 9.1** sets forth the terms and conditions for Contractor to obtain relief with respect to impacts caused by an Excusable Event. Contractor shall give notice ("**Excusable Event Notice**") to Owner not more than five (5) Days after the occurrence of any Excusable Event Basis for which it may be entitled to seek relief. The Excusable Event Notice must be given by Contractor before proceeding to execute any additional Work occasioned by the Excusable Event, except as provided in **Section 9.1.3**. Contractor will not be entitled to reimbursement or other recovery for any additional Work related to the Excusable Event Basis performed prior to the receipt by Owner of the applicable Excusable Event Notice except as provided in **Section 9.1.3**. The Excusable Event Notice will, to the extent practicable include the following analyses: (i) the specific nature of the occurrence and detail the efforts Contractor has made or is going to make to overcome or remove the Excusable Event Basis and to minimize the potential adverse impact resulting from such Excusable Event Basis; (ii) the specific reasons why Contractor believes it is entitled to any Adjustment; and (iii) an initial assessment of the Adjustments to which Contractor may be entitled by reason of such Excusable Event Basis. Within fifteen (15) Days after the occurrence of any Excusable Event Basis for which it may be entitled to seek relief, Contractor shall provide Owner with a full impact analysis detailing the impact of the occurrence, its recovery plan and a detailed estimate of any Adjustments. If it is not reasonably possible to provide a full impact analysis (including establishing the basis for and the amount of any Adjustment) within such fifteen (15) Day period,

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Contractor shall provide all information reasonably possible and will have up to but not exceeding thirty (30) additional Days to submit its full impact analysis. Any impact not described with particularity within the periods set forth above is waived. Strict compliance with this **Section 9.1** is a condition precedent to the establishment of an Excusable Event. Subject to **Section 9.1.2**, Contractor will be entitled to an Adjustment to the extent that such Excusable Event Basis constitutes an Excusable Event; **provided, however**, that Contractor shall not be entitled to any increase to the Contract Price with respect to any loss or damage to the Work for which Contractor bears the risk of loss pursuant to **Section 22.3** (except for any uninsured delay impact costs). Failure by Contractor to timely give the required Excusable Event Notice and full impact analysis will preclude Contractor's right to invoke the protection of this **Article 9**. If within a reasonable time after an Excusable Event Basis has caused Contractor to suspend or delay performance of the Work, Contractor has failed to take such action as Contractor could lawfully and reasonably initiate to remove or relieve either the Excusable Event Basis, or its direct or indirect effects, Owner may, in its sole discretion and after notice to Contractor, at Contractor's expense, initiate such reasonable measures as will be designed to remove or relieve such Excusable Event Basis, or its direct or indirect effects, and thereafter require Contractor to resume full or partial performance of the Work. If, pursuant to **Article 10**, Owner and Contractor agree to a lump sum, fixed schedule (or any other determination of) the applicable Adjustments for an Excusable Event, such Adjustments shall be set forth in a Change Order signed by the Parties.

9.1.2 Rights Limited. The rights and remedies set forth in this **Section 9.1** and **Article 10** constitute Contractor's sole and exclusive rights and remedies in the event of an occurrence of an Excusable Event, and Contractor hereby waives all other rights and remedies at law and/or in equity that it might otherwise have against Owner on account of an Excusable Event Basis. Notwithstanding anything to the contrary herein, with respect to any Excusable Event that is an event of Force Majeure, Contractor will not be entitled to (and the applicable Adjustments shall not include): (i) an increase in the Contract Price unless and then only to the extent that the aggregate impact of all Excusable Events that are events of Force Majeure (calculated on the basis of actual out-of-pocket cost, excluding overhead, general and administrative expenses, and profit) [REDACTED] and (ii) an extension of the Major Contract Milestones unless and then only to the extent that the aggregate impact of all Excusable Events that are events of Force Majeure require an aggregate extension in excess of thirty (30) Days. In confirmation and furtherance of the terms and provisions of this **Section 9.1**, the Contractor acknowledges and agrees that the Contract Price, the Major Contract Milestones, and the other provisions of this Agreement may only be adjusted with respect to an Excusable Event Basis in accordance with, and to the extent permitted by, the terms and provisions of this **Section 9.1**. Failure of Contractor to timely give the required notices and analyses hereunder will preclude Contractor's right to invoke the protection of this **Section 9.1**. Contractor may not suspend, in whole or in part, performance of the Work with respect to any Dispute over Adjustments or Excusable Events or the review and negotiation of any Adjustments unless directed to do so by Owner.

9.1.3 Emergencies. Contractor shall take reasonable actions to prevent, mitigate and otherwise minimize actual or imminently threatened damage, injury and loss to

individuals or property during the performance of the Work. If, emergency conditions arise and damage, injury and loss to individuals or properties occurs or is imminently threatened, Contractor will not be barred from obtaining relief pursuant to this **Section 9.1** if such reasonable actions were necessary prior to providing the Excusable Event Notice to Owner; **provided**, that Contractor thereafter complies with the requirements of **Section 9.1.1** and Owner is notified of such emergency as soon as possible.

9.2 Owner-Initiated Changes

9.2.1 Further Refinement, Corrections, and Detailing. It is understood and agreed that the Design of the Facility will be subject to further refinement, correction and detailing by the Parties from time to time. Contractor will be entitled to an Adjustment (and Owner shall be required to issue a Change Order) for such refinement, correction, or detailing, but only to the extent that such refinement, correction, or detailing is not minor or reasonably inferred to be a required or necessary part of the Work under this Agreement.

9.2.2 Changes. Owner may, from time to time, without invalidating this Agreement, order by written notice given to Contractor (a "**Change Order**") changes in the Work (including additions to or deletions of portions of the Work and changes in the quality of, function of, execution of, time for, or sequence of, all or any portion of the Work) ("**Changes**"). If any such Change causes an increase or decrease in the cost of, or timing required to provide, the Work, an Adjustment shall be made.

9.2.3 Change Determination Requests. Owner may by notification in writing to Contractor initiate the process to determine the applicable Adjustment for Changes that Owner is contemplating ordering (a "**Change Determination Request**"). Each Change Determination Request will be accompanied by a description of the contemplated Changes. By issuing a Change Determination Request, Owner does not obligate itself to order the described Changes, regardless of whether the Parties reach an agreement as to the applicable Adjustments. Owner may issue a Change Order regardless of whether Owner has previously issued a Change Determination Request for some or all of the applicable Changes or whether, having issued a Change Determination Request, the Parties have agreed to any or all of the applicable Adjustments.

9.2.4 Change Order Documentation. Contractor shall not perform any Change until a Change Order has been issued therefor. All Change Orders shall be in the form of **Exhibit F-3** or such other form that states explicitly and prominently that it constitutes a Change Order under this Agreement. Each Change Order shall be effective on the date when signed on behalf of the Owner and given to Contractor pursuant to **Section 25.5**. Contractor will countersign one copy or counterpart of the Change Order and return it to Owner on receipt. Upon the effectiveness of a Change Order, the Work shall be changed as stated therein and Contractor shall perform the Work as so changed in accordance with and subject to all of the terms of this Agreement. If the Parties have not agreed to the applicable Adjustments, the Change Order shall not state any Adjustments and the Adjustments shall be determined thereafter pursuant to the Adjustments Methodology. Once the Parties have agreed to the Adjustments, the Change Order shall be amended to state such Adjustments and Contractor and Owner shall both sign and deliver such

amendment to each other. Unless a Change Order explicitly provides to the contrary, the signature and delivery by Contractor and Owner of a Change Order (either the original version or a subsequently amended one) that states any Adjustments shall constitute the legal and binding agreement among them that such stated Adjustments are the sole and exclusive Adjustments and consideration to which any of them are entitled in connection with the Changes described therein. Contractor may not suspend, in whole or in part, performance of the Work with respect to any Dispute over Adjustments or Change Orders or the review and negotiation of any Adjustments unless directed to do so by Owner. If there is a Dispute of whether any item is in or out of the scope of Work required of Contractor under this Agreement, Owner may issue a Change Order requiring Contractor to perform such item as part of the Work and Contractor shall (without waiving any rights or remedies with respect to such Change or Dispute) proceed with such Work. If it is determined that such item was not within the scope of the Work, Contractor will be entitled to an Adjustment therefor as set forth in this **Section 9.2**.

ARTICLE 10

ADJUSTMENT METHODOLOGY

10.1 Determination of Adjustments. The determination of all Adjustments with respect to Change Orders, Change Determination Requests, and Excusable Events shall be made in accordance with the methodology (“**Adjustment Methodology**”) set forth in this **Article 10**.

10.2 Procedure for Determining Adjustment. It is the expectation that most Contract Price Adjustments will be determined on a lump sum fixed schedule adjustment basis, provided, that at Owner’s sole option exercised in its sole discretion, Owner may designate certain Contract Price Adjustment to be determined on an open-book time and materials basis, calculated in accordance with **Section 10.3**, with the Adjustments to Major Contract Milestones to be determined based on information developed as the Work proceeds. Except to the extent Owner and Contractor mutually agree otherwise, (a) within fifteen (15) Days after receipt of a Change Determination Request or a Change Order for which Adjustments are not yet agreed and (b) by the due date of the full impact analysis required pursuant to **Section 9.1.1** for an Excusable Event Basis, Contractor shall provide Owner for its review and approval, with a written detailed analysis (the “**Contractor Response**”) setting forth all Adjustments Contractor believes are required under this Agreement with respect to the applicable Changes and Excusable Events, including with respect to Contract Price, Major Contract Milestones, and other applicable provisions of this Agreement. The Contractor Response shall include, among other things, an itemization or estimate (which estimate shall be prepared in a manner and at rates in accordance with **Section 10.3**) of: (i) total job hours increased or decreased (detailed as to each subdivision of each of home office, field staff and field craft labor) and associated labor rates and/ multipliers or markups; (ii) estimated quantities, qualities (as required) and direct costs of Equipment; (iii) estimates of Subcontractor charges and any bids received from Subcontractors and potential Subcontractors contacted by Contractor in connection with the Contractor Response; (iv) all other direct costs associated with the performance of the Work, including travel and living, reproduction, printing, consultants, Subcontractors, costs of Contractor-owned equipment; (v) reasonable contingencies for the foregoing items appropriate and customary for the degree of uncertainty in the estimate; (vi) the impact, if any, on the Major Contract Milestones, and (vii)

any other information Owner may reasonably require to determine the appropriate Adjustments. Owner shall, within fifteen (15) Days after receipt of the Contractor Response, notify Contractor as to whether it agrees or disagrees with such the Adjustments set forth in the Contractor Response or has insufficient information to do so. Contractor and Owner will then cooperate (i) to get Owner any information it reasonably require and (ii) to use their respective good faith efforts to negotiate and agree on the applicable Adjustments (including a lump sum, fixed-price Contract Price Adjustment and a fixed schedule Adjustment). Such negotiations shall be on a completely open-book basis.

10.3 Basis for Adjustments. Except to the extent otherwise provided in **Articles 9**, all Contract Price and schedule Adjustments shall be determined by utilizing the methodologies, factors, multipliers, analytics, and other criteria included in the Basis of Bid; provided, that no contingency will be allowed in such Adjustment in any case where the Contract Price Adjustment is not on a lump sum basis. To the extent that the Basis of Bid is not directly applicable to the situation for which an Adjustment (or portion thereof) is being determined or the application of the Basis of Bid yields an inequitable result, the applicable criteria in the Basis of Bid shall be equitably adjusted for that situation. To the extent that for a particular situation the Basis of Bid is not reasonably susceptible to such an equitable adjustment, the applicable Contract Price Adjustment shall be determined in accordance with **Exhibit R**. To the extent that an Adjustment is with respect to a change (including increase, decrease, elimination, replacement, or any other change) to Work performed or expected to be performed by a Subcontractor that is an Affiliate of Contractor, the Adjustment shall be determined as if the Contractor is performing such Work directly (i.e., as if the Affiliate was part of the Contractor and not a separate Subcontractor). All Adjustments of the Major Milestone Dates shall be determined by the reasonable impact of the applicable Change Order or Excusable Event to the Project Schedule on the critical path. Neither Owner nor Contractor shall be entitled to any Adjustment based on its respective time or cost of analyzing, negotiating, or otherwise determining any Adjustments. Contractor shall not be entitled to any recovery for (and there shall be no Contract Price, schedule, or other Adjustment for) any increased adverse impact resulting from (i) unreasonable delays in implementing a Change Order or in overcoming or removing an Excusable Event Basis or (ii) Contractor failing to take all reasonable steps to minimize the potential impact resulting from such Excusable Event Basis or Change Order.

10.4 Non-Lump Sum Fixed Schedule Adjustments. Unless and until Contractor and Owner execute a Change Order setting forth a Lump Sum Adjustment and a fixed schedule Adjustment for a Change Order or Excusable Event: (i) Contractor shall submit daily records to Owner by the next Business Day for all craft personnel who performed Work with respect to such Change Order or Excusable Events detailing the hours involved in such Work and the type of Work so performed, (ii) Contractor shall submit weekly records to Owner by the first Day of the succeeding week for all other personnel who performed Work with respect to such Change Order or Excusable Events detailing the hours involved in such Work and the type of Work so performed, (iii) Contractor shall submit Monthly records to Owner along with its Application for Payment for that Month detailing all other costs incurred with respect to such Change Order or Excusable Events, (iv) Contractor shall submit Monthly records to Owner along with its Application for Payment for that Month detailing all schedule impacts (including to Major Contract Milestones with respect to such Change Order or Excusable Events), and (v) Contractor shall, in accordance with the procedures set forth in **Article 8**, include in its Applications for

Payment any undisputed portion of Contractor's proposed Adjustment in the Contract Price for Changes that have then been performed by Contractor. Strict Compliance with this **Section 10.4** is a condition precedent for the Contractor's entitlement to the applicable Adjustment.

ARTICLE 11

TEST AND INSPECTIONS

11.1 Testing. Contractor shall conduct, arrange, or obtain (at its sole expense) all inspections and tests, including the Performance Guarantee Tests, required to be performed (i) to meet its obligations under this Agreement and (ii) that are necessary for the proper execution and completion of the Work (including all certification testing and associated reports required by Applicable Law or applicable Codes that must be conducted by a qualified independent party). Contractor shall provide for or arrange for all testing personnel (excluding operating personnel to be provided by Owner in accordance with **Section 5.9**). **Section 4.2** requires Contractor to maintain qualified personnel on the Job Site at certain times (including testing) to supervise Owner's operators regarding operation and maintenance of the Subproject. At such time as hot commissioning has been completed and Contractor believes that the Subproject is ready for the performance of the Performance Guarantee Tests, Contractor shall so notify Owner in writing. Within five (5) Days thereafter, Owner will notify Contractor whether it concurs with Contractor's belief. As soon as practicable after delivery of Owner's notification of concurrence, but in no event earlier than ten (10) Days thereafter, Contractor shall conduct the Performance Guarantee Tests for that Subproject on no less than five (5) Days advance notice of the time and date of the commencement. Performance Guarantee Tests shall be scheduled with due regard for minimizing the operating expenses of and maximizing revenues to be derived from operation of the Units during such tests. The Performance Guarantee Tests must be conducted: (i) in the presence of Owner, (ii) utilizing the personnel provided by Owner, acting under the direct technical supervision and control of Contractor (iii) when all Equipment and Systems are operating as designed (without auxiliary, standby or temporary equipment or machinery, unless otherwise approved in writing by Owner) in its usual mode of operation (using a normal complement of operating personnel) within the manufacturers' specifications, recommendations and warranty requirements, and without over-stressing or over-pressurizing any Systems; (iv) when the Subproject is operating in full automatic mode without the need for any manual intervention; (v) when commencing performance testing is consistent with Prudent Utility Practices; and (vi) pursuant to **Exhibit G** and the Performance Guarantee Test Procedures and in strict accordance with Project Requirements, including 401 KAR Chapter 59. A draft of the proposed Performance Guarantee Test Procedures shall be prepared by Contractor and delivered to Owner not less than one hundred twenty (120) Days prior to the Scheduled Mechanical Completion Date of the Subproject. Owner shall review such draft and provide written comments to Contractor within thirty (30) Days of receipt of the draft Performance Guarantee Test Procedures. Contractor and Owner shall cooperate and diligently work to complete an agreed final version of the Performance Guarantee Test Procedures in accordance with **Exhibit G** no later than thirty (30) Days prior to the Scheduled Mechanical Completion Date of the Subproject. If all of the criteria for passage of a Performance Guarantee Test in accordance with **Exhibit G** fail to be met, Contractor shall immediately correct and/or remedy the Defects and other conditions that caused such failure in accordance with **Section 12.1**. Upon completion of such corrective and/or remedial actions, Contractor shall re-perform the Performance

Guarantee Test upon not less than twenty four (24) Hours prior written notice to Owner. The foregoing procedures shall be repeated until all of the criteria for passage of a Performance Guarantee Test in accordance with **Exhibit G** are met, but Contractor's obligation to repeat such Performance Guarantee Tests shall in no way excuse Contractor from timely achievement of the Guaranteed Commercial Operation Date and Guaranteed Final Completion Date. The results of all inspections and tests shall be provided to Owner together with gross and reduced data and other information reasonably requested by Owner. The Performance Guarantee Tests shall be conducted in accordance with this **Section 11.1** and **Exhibit G** for the purpose of demonstrating the achievement of Commercial Operation and Final Completion, as the case may be.

11.2 Witnessing Tests and Inspection. Contractor shall perform all inspection, pre-Performance Guarantee Testing, expediting, quality surveillances, and traffic services as necessary for the performance of the Work. Contractor's responsibilities under this **Section 11.2** include inspecting and testing the Work in progress, (including Equipment) both on and off the Job Site at intervals appropriate to the stage of construction, fabrication, or shipment as is customarily inspected or tested in accordance with Professional Standards, including inspecting Work in progress as necessary to ensure that such Work is proceeding in accordance with this Agreement and the Major Contract Milestones. All Third Party inspections, tests, or approvals must be performed by qualified organizations acceptable to Owner. If Applicable Law requires any Work to specifically be inspected, tested, or approved, Contractor shall assume full responsibility therefor and furnish to Owner the required certificates of inspection, testing, or approval. Not later than one hundred twenty (120) Days prior to the first expected delivery of Equipment to the Trimble County Generating Station Site, Contractor will supply to Owner a quality surveillance plan for all Equipment that will be inspected by Contractor. A chart, accompanying each Monthly progress report delivered by Contractor shall specify the date, time, and location of Hold Points and other factory tests, inspections, and witness points of which Contractor is then aware and intends to witness with respect to Equipment or other work to be provided or performed by Subcontractors in the sixty (60) Day period following the Month in which each such progress report is delivered to Owner. If and when Contractor obtains new information about such Hold Points and other factory tests, inspections, or witness points or other Hold Points, factory tests, inspections, or witness points that was not available to it when the Monthly status report was delivered, it will promptly advise Owner and update such information as necessary to allow Owner a reasonable opportunity to attend such event. Contractor shall give reasonable notice of changes to such dates, times, and locations to allow Owner to make arrangements to attend, it being understood that tests, inspections, or witness points to be performed outside the United States will require additional notice. Owner and its invitees have the right, but not the obligation, to attend any inspections, tests, or approvals of the Work. In no event shall Contractor's obligation to provide notice regarding certain tests, inspections, or approvals or Owner's and its designees' right to attend tests, inspections, or approvals limit, delay, or modify Contractor's obligation to perform all tests, inspections, or obtain approvals required by this Agreement. Successful completion of factory or other off-Job Site tests is a precondition to shipment of such Equipment to the Job Site or other Contractor storage facility, unless otherwise agreed by Owner. Contractor shall thereafter implement such plan and re-perform and demonstrate that such test has been passed. Should Contractor fail to give proper notice under this **Section 11.2**, at Owner's option, Contractor shall re-perform or re-inspect any such test or inspection as to which Contractor failed to give proper notice if Owner (i) have reviewed the test or inspection results (which are to be provided to Owner within seven (7) Days

of such failure or as soon thereafter as test results are available to Contractor) and (ii) have given notice to Contractor questioning the validity, accuracy, or completeness thereof. Attendance by Owner at any such test or inspection despite the lack of proper notice will waive Owner's right to cause Contractor to so retest or re-inspect for failure to give proper notice.

11.3 Defects during Performance Guarantee Tests. Without limiting the requirements of **Section 6.6**, after completion of any Performance Guarantee Test or any retest, Owner and Contractor shall consult concerning the results of such test and Owner shall advise Contractor in writing of any Defects that it has discovered or observed during the performance thereof. If Contractor is notified of such Defects or adjustments, Contractor shall immediately commence and promptly: (i) complete corrective measures to rectify such Defects and any other Defects of which it is aware (including, replacement of any Defective parts) and (ii) make any necessary adjustments, in each case, at Contractor's sole cost and expense. As soon as reasonably practicable but in no event more than twenty-four (24) Hours after the completion of such Performance Guarantee Tests (or as soon thereafter as such reports are first available to Contractor) following the applicable test or inspection, Contractor shall forward to Owner copies of all test or inspection results together with such other information Owner reasonably requires in relation thereto.

11.4 Retests. Prior to any retest of a Subproject, Contractor shall give reasonable notice advising Owner that all Defects have been corrected and all necessary adjustments have been made. Such notice must identify the date upon which the Subproject will be ready for such retesting. Within five (5) Days, Owner shall review the adjustments or corrections made by Contractor and will determine whether a retest is yet warranted. Following a favorable determination by Owner, Contractor shall promptly re-perform the retest. **Section 11.3** shall apply to all retests.

ARTICLE 12

CORRECTION OF WORK

12.1 Correction of Work. Prior to the Commercial Operation for each Subproject, Contractor shall, at the earliest practical opportunity, correct, repair, or replace any portion of the Work that is Defective without regard to the stage of completion of the Work or the time or manner of discovery of the Defect. If other portions of the Work are adversely affected by or are damaged by such Defective Work, Contractor shall, at no additional cost or expense to Owner and at the earliest practical opportunity, correct, repair or replace such affected or damaged Work. Contractor shall bear all costs of correcting such Defective Work, including additional testing and inspections and compensation for any Design or engineering services and expenses made necessary thereby.

12.2 Urgent Repairs. If by reason of any accident, failure, or event occurring to, in, or in connection with the Work or any part thereof either during the execution of the Work or during any period of warranty hereunder, any remedial or other work or repair is in the opinion of Owner urgently necessary and Contractor is unable or unwilling at once to do such work or repair, Owner may, with its own forces or other contractors, do such work or repair. If the work or repair so done is Work which Contractor was liable to do at its own expense under this

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Agreement, all costs and expenses incurred by Owner in so doing as a result of such event shall be paid by Contractor to Owner on demand. Owner, as soon after the occurrence of any such emergency as may be reasonably practicable, shall notify Contractor thereof in writing.

12.3 Damage to Existing Facilities. To the extent that Contractor or Subcontractors cause any physical damage or loss to any equipment, structure, or portion of the Work (including Work performed during the Warranty Period) as to which care, custody, and control and risk of loss (without regard to passage of title) has passed to Owner or to the Existing Facilities (but not Work for which care, custody, and control and risk of loss has not yet passed to Owner), Contractor shall be liable for making payment to Owner for the cost to repair, correct, or replace such loss or damage, not to exceed [REDACTED] per occurrence, and upon such payment Owner otherwise releases Contractor from liability for such physical damage to or loss of any equipment, structure, or portion of the Work as to which care, custody, and control and risk of loss has passed to Owner or to the Existing Facilities (but not Work for which care, custody, and control and risk of loss has not yet passed to Owner). Payments to be made by Contractor under this **Section 12.3** shall be made to Owner within fifteen (15) Business Days of Owner’s demand therefor.

ARTICLE 13

WARRANTY

13.1 Work Warranty. Contractor shall perform the Work as a prudent contractor consistent with Professional Standards on projects similar to this Facility project; and without limiting the generality of the foregoing, warrants to Owner that the Work, including the Equipment will: (i) be free from Defects in design, materials, and workmanship (including excessive wear, noise, or manual intervention); (ii) be new; (iii) be of good quality and good condition and fit for the purpose of treating and transporting coal combustion residuals in accordance with Prudent Utility Practices; (iv) be delivered, handled, stored (whether on or off of the Job Site) and installed in accordance with manufacturers’ and/or Subcontractors’ instructions and requirements; and (v) conform to Project Requirements (including the Performance Criteria).

13.2 Warranty Period. The “Warranty Period” means for each Subproject, a period commencing on Commercial Operation of that Subproject and ending seven hundred thirty-one (731) Days thereafter; **provided, however,** the correction, repair, or replacement of any Defect (and the completion of any Punch List Item after Commercial Operation) shall be warranted for an extended period equal to the period of warranty set forth above, commencing on the completion of the correction, repair or replacement of the Defect or Punch List Item. Subject to **Section 13.9**, the Warranty Period for any Defect that has been properly corrected, repaired, or replaced will not extend beyond the date that is twice the number of Days of the original warranty period therefor as set forth in this **Section 13.2**; **provided, however,** (i) if a portion of the Work is in violation of **Section 4.38**, without limiting the recourse of Owner hereunder and notwithstanding anything to the contrary herein, the Warranty Period with respect to any Work performed in violation of **Section 4.38** shall extend until the second (2nd) anniversary of the correction of the violation of **Section 4.38**.

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13.3 Breach of Warranty. If, during the applicable Warranty Period, as it may be extended, Defects in the Work are found, Contractor shall correct, repair, modify, or replace such Defective Work, including repair, replacement, disassembly, removal, transportation, reconnection, reinstallation, reassembly, testing, or re-performance necessary to accomplish the remedial Work and perform the Work necessary to restore the Facility and the associated Units, as necessary, to proper operating condition and shall demonstrate to the reasonable satisfaction of Owner that corrections have been properly made. During the applicable Warranty Period, as it may be extended, to the extent that Contractor, Subcontractors, or any Defect cause any physical damage or loss to any equipment, structure, or portion of the Work (including Work performed during the Warranty Period) as to which care, custody, and control and risk of loss (without regard to passage of title) has passed to Owner or to the Existing Facilities (but not Work for which care, custody, and control and risk of loss has not yet passed to Owner), Contractor shall be liable for making payment to Owner for the cost to repair, correct, or replace such loss or damage, not to exceed [REDACTED] per occurrence, and upon such payment Owner otherwise releases Contractor from liability for such physical damage to or loss of any equipment, structure, or portion of the Work as to which care, custody, and control and risk of loss has passed to Owner or to the Existing Facilities (but not Work for which care, custody, and control and risk of loss has not yet passed to Owner). Payments to be made by Contractor under this **Section 13.3** shall be made to Owner within fifteen (15) Business Days of Owner's demand therefor. Contractor shall use its best efforts to remedy any such Defect so as to minimize revenue loss to Owner and to avoid disruption of Owner's operations; **provided** that if the Facility has ceased operating or is materially and adversely affected in its operations as a result of such a Defect, then Contractor's efforts shall be undertaken on an emergency basis (which shall in no event commence more than twenty-four (24) Hours after such notice of the Defect). Contractor's corrective action shall include, if applicable, making prudent temporary remedies to enable the safe operation of the Facility over its full operating range (or as much of such range as is possible), followed by permanent remedies. If Contractor fails to initiate and diligently take steps to pursue corrective action consistent with Prudent Utility Practices within a commercially reasonable period (or such lesser reasonable period of time in the event of a forced outage) of Contractor's receipt of notice from Owner and continuously pursue such correction thereafter or if giving the Contractor notice and an opportunity to perform the warranty Work is impractical under the circumstances, Owner may undertake or arrange such corrective action at Contractor's expense. The correction of a Defect by Owner pursuant to the previous sentence, **Article 12** or **Section 5.7** will not void Contractor's warranty and will only limit Contractor's warranty to the extent that the correction of such Defect by Owner is not in accordance with Contractor's applicable reasonable written recommendations or, in the absence thereof, Prudent Utility Practices.

13.4 Subcontractor Warranties. Contractor shall use commercially reasonable efforts to obtain warranties for the benefit of Contractor and Owner from Subcontractors in relation to their respective portions of the Work. Contractor shall provide copies of all warranties and guarantees obtained by Contractor to Owner as part of the Operating and Maintenance Manuals. Such warranties must be written to survive Owner's and Contractor's tests, inspections, and approvals and must be assignable by Contractor to Owner without Subcontractor consent. On or after the expiration of any applicable Warranty Period, at the request of Owner, Contractor shall assign to Owner the underlying Subcontractor warranties. Upon assignment, any such warranty must be in full force and effect in accordance with its terms.

13.5 Primary Liability. Contractor has primary liability with respect to the warranties set forth in this Agreement, whether or not any Defect or other matter is also covered by a warranty of a Subcontractor, and Owner need only look to Contractor for corrective action. In addition thereto, Contractor's warranties expressed herein may not be restricted in any manner by any warranty of a Subcontractor or other Third Party, and the refusal of a Subcontractor or other Third Party to provide a warranty or correct a Defect will not excuse Contractor from its liability as to the warranties provided herein.

13.6 Defect Limitations. For purposes of this Article 13, normal wear and tear; damage to the extent caused by the failure to operate or maintain the affected Work in accordance with the reasonable and practical recommendations set forth in the Operating and Maintenance Manuals (or Prudent Utility Practices in the absence of having received all or any portion of the Operating and Maintenance Manuals or if such manuals do not provide sufficient guidance); damage to the extent caused by misuse or abuse; or additional damage to the extent caused by Owner's failure to conform to Prudent Utility Practices after discovery of Defects; will not constitute a Defect hereunder. Normal wear and tear will not constitute a Defect; **provided, however,** the inability to achieve the Performance Guarantees throughout the Warranty Period will constitute a Defect.

13.7 Warranty Assistance. At the request of Contractor, Owner shall furnish, to the extent reasonably available, at Contractor's expense, available personnel and facilities to assist Contractor in any repairs, modifications, or replacements pursuant to its warranty obligations.

13.8 Reasonable Access. Owner shall provide Contractor representatives reasonable access to the Facility for the purpose of performing warranty Work upon reasonable notice during times mutually agreed by Owner and Contractor. Contractor acknowledges that warranty Work must be coordinated with the ongoing operations of the Units. Contractor should anticipate that, absent exigency, Owner will likely schedule time for the performance of warranty Work during outages or non-peak periods.

13.9 Root Cause Repairs. If there are two or more similar (or same) type of Defects in the Work, including failures of any Equipment, Component or System, prior to the end of the applicable Warranty Period, as it may be extended, or Performance Guarantee Tests, Contractor, at its expense, shall perform a root cause investigation of such Defects and, if a root cause for such Defects exists, Contractor shall make such repairs, replacements, or adjustments necessary to correct such root cause. Notwithstanding anything to the contrary herein, including the expiration of the applicable Warranty Period, Contractor shall warrant such repairs, replacements, or adjustments covering such root cause for a period ending on the second anniversary of the completion of such repairs, replacements, or adjustments.

13.10 Exclusivity of Warranties and Remedies. The warranties provided in this Agreement are exclusive and no other warranties of any kind, whether statutory, express, or implied (including implied warranties of merchantability and fitness for a particular purpose) shall apply. The remedies set forth in this Agreement are the exclusive remedies of Owner for any failure by Contractor to comply with its warranty obligations set forth in this Agreement; **provided,** that such limitation shall not limit those rights or remedies available to Owner to redress Contractor's failure to satisfy other obligations under this Agreement, including

obligations pursuant to **Section 22.2** and to achieve Commercial Operation and Final Completion, which achievement is required to occur by the respective dates guaranteed therefor.

13.11 Compensation for Certain Warranty Claims. Owner shall reimburse Contractor for its reasonable labor hours and travel costs (directly and/or through Subcontractors) in accordance with Exhibit R to the extent incurred with respect to any claim by Owner of an alleged Defect that turns out not to be a Defect because of the application of Section 13.6.

ARTICLE 14

PROTECTION OF PERSONS AND PROPERTY

14.1 Safety Programs. Contractor shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the performance of this Agreement, including a fitness for duty policy and other appropriate precautions and programs for areas in and around the Trimble County Generating Station Site. Prior to the earlier of one hundred twenty (120) Days after the Effective Date and thirty (30) Days prior to mobilization to the Trimble County Generating Station Site, Contractor shall prepare and deliver to Owner a plan to ensure proper health, safety, and environmentally sound practices are employed and enforced in the performance of the Work. At a minimum, such plan shall require Contractor to comply, and cause all Subcontractors to comply, with (i) those rules, regulations and procedures set forth in **Exhibit H**; (ii) Project Requirements; and (iii) applicable rules or requirements of Owner's unions on the Trimble County Generating Station Site. The efficacy or implementation of such plan shall not relieve Contractor of its obligations under this Agreement. If Owner becomes aware of any Work, or the performance of any Work, that it reasonably believes constitutes a threat to the health or safety of persons, property, or the environment, then, without limiting any other rights of Owner hereunder, Owner may (but will not be obligated to) immediately suspend the performance of the Work and thereafter promptly advise Contractor of the cause therefor. Such suspension may be maintained until such cause is removed. All costs related to such suspension and any other adverse impact on Contractor or the Work attributable thereto shall be the responsibility of Contractor and no relief under this Agreement shall be provided. Owner, in its reasonable opinion, may exclude from the Trimble County Generating Station Site any individual whose conduct it believes is prejudicial to safety, health, protection of persons, property, or the environment, or is found or suspected to be in violation or in disregard of the requirements of this **Article 14**, this Agreement, or Applicable Law.

14.2 Applicable Law. Contractor shall give notices and comply with Applicable Law bearing on the safety of Persons, property and the environment or their protection from damage, injury or loss, including all standards of the United States Occupational Safety & Health Administration applicable to the Work.

14.3 Safety Precautions. Contractor shall take all reasonable precautions for safety of, and shall provide all reasonable protection to prevent damage, injury or loss to:

- (i) employees of Contractor and Subcontractors or other individuals performing the Work and all other individuals who may be affected thereby, including other individuals on the Trimble County Generating Station Site;
- (ii) the Work, Equipment, Consumables, and Construction Aids, whether in storage on or off of the Job Site, under the care, custody or control of Contractor or Subcontractors; and
- (iii) Existing Facilities and other property at the Trimble County Generating Station Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, waterways, roadways, structures and utilities, it being agreed that Contractor will be liable for the Liabilities incurred by Owner and caused by Contractor or Subcontractors.

14.4 Community Relations. Contractor recognizes the introduction of Contractor's workforce (and those of Subcontractors) has the potential to disrupt the local community. Contractor will proactively alert those individuals for whom it is responsible on the Trimble County Generating Station Site to exercise due caution entering and leaving the Trimble County Generating Station Site and to otherwise conduct themselves in a manner consistent with good community relations.

14.5 Security. Contractor shall take all precautions and measures as may be necessary to secure the Job Site and other portions of the Trimble County Generating Station Site on which Work is being performed at all hours, including evenings, holidays and non-work hours and other portions of the Trimble County Generating Station Site when Work is being performed on such portion. Contractor is not entitled to rely on security provided by Owner. Contractor shall coordinate its Job Site security functions with Owner's security functions so as not to detract from, or impose upon, Owner's security measures at the Trimble County Generating Station Site. Contractor shall erect, maintain, or undertake, as required by existing conditions and the performance of this Agreement, all reasonable safeguards for safety and protection, including posting danger signs and other warnings against hazards, promulgating safety regulations, and notifying Owner and users of adjacent sites and utilities. Such precautions may include the provision of security guards and/or fencing.

14.6 Dangerous Materials. When use or storage of dangerous materials or equipment or unusual methods are necessary for execution of the Work, Contractor shall exercise utmost care and carry on such activities only under the supervision of properly qualified personnel. Explosives shall not be used anywhere on the Job Site or the Trimble County Generating Station Site, without the prior written consent of Owner.

14.7 Safety Personnel. Contractor shall assign at least one full-time Job Site safety officer who shall be responsible for introducing, administering, and monitoring procedures to promote safe working conditions on the Job Site (and other areas of the Trimble County Generating Station Site where Work is to be performed) and compliance with Applicable Law. Contractor shall provide an appropriate medical facility at the Job Site.



14.8 Loading. Contractor must not load or permit any part of the Work, the Job Site or other portions of the Trimble County Generating Station Site to be loaded so as to endanger the safety of Persons or property.

14.9 Notices to Owner. Contractor shall immediately (and in each case, but in no event later than a period of time equal to one-half the amount of time Owner has to report any incident to a Governmental Authority) notify Owner by telephone or messenger of any and all potential lost time accidents, recordable injuries (as defined under OSHA), and any property damage arising out of or in connection with the Work. Contractor shall provide Owner with a written report, giving of full details and statements of any witnesses within twenty-four (24) Hours of the occurrence of the event. In addition, if death, serious bodily injury or substantial damage occurs, Contractor shall report the accident immediately by telephone or messenger to Owner.

14.10 Code of Business Conduct. Contractor hereby acknowledges receipt of the LG&E and KU Services Company Contractor Code of Business Conduct and agrees to comply therewith as it may be amended from time to time.

14.11 Hazards and Training. Contractor shall furnish adequate numbers of trained, qualified, and experienced personnel and appropriate safety and other equipment in first-class condition, suitable for performance of the Work. Such personnel shall be skilled and properly trained to perform the Work and recognize all hazards associated with the Work. Without limiting the foregoing, Contractor shall participate in any safety orientation of Owner (or any Affiliate of Owner) familiarization initiatives related to safety and shall strictly comply with any monitoring initiatives as determined by Owner. Contractor acknowledges that it has inspected all equipment, structures, and property of Owner to determine the existence of hazards incident to the performance of the Work, and has adopted suitable precautions and methods for the protection and safety of its employees and the property.

14.12 Drug and Alcohol. No individual will perform any of the Work while under the influence of any illegal or controlled substance or alcohol. No alcohol may be consumed four (4) Hours prior to any individual's performance of the Work or at any time during the workday. An individual will be deemed under the influence of alcohol if such individual is found to have a blood alcohol level of .02 percent or greater. In addition to the requirements of the drug and/or alcohol testing program set forth in **Exhibit H**, Contractor shall: (i) institute a random drug and/or alcohol testing program covering all individuals that will perform any of the Work; (ii) promptly, upon the written request of Owner, perform drug and/or alcohol tests on all individuals that will perform any of the Work; and (iii) perform drug and/or alcohol tests on any individual that will perform any of the Work under either of the following circumstances: (a) where the individual's performance either contributed to an accident or dangerous condition or cannot be completely discounted as a contributing factor to an accident or dangerous condition which involves actual or undue risk or off-site medical treatment of any individual or property damage or (b) where Owner determines in its sole discretion that there is reasonable cause to believe such individual is using drugs or alcohol or may otherwise be unfit for duty. Individuals tested in accordance with **clause (a) or (b)** above will not be permitted to perform any Work until the test results are established. Contractor shall be solely responsible for administering and conducting drug and alcohol testing, as set forth herein, at Contractor's sole expense. As



applicable and in addition to any other requirements under this Agreement, Contractor shall develop and strictly comply with any and all alcohol and/or drug testing requirements required by Applicable Law. Notwithstanding anything to the contrary herein, if the rules and regulations of Owner pertaining to the Trimble County Generating Station Site are at any time more stringent than the requirements of this Agreement, Contractor will comply and cause Subcontractors to comply with such more stringent rules and regulations.

ARTICLE 15

SEPARATE CONTRACTORS AND ACTIVITIES BY OWNER

15.1 Separate Work. Owner reserves the right to perform either with its own forces or through other contractors and subcontractors construction or operations related to the Facility or any other construction or other work at the Job Site or the Trimble County Generating Station Site.

15.2 Integration. Contractor shall use reasonable best efforts to arrange the performance of the Work so that the Work and the work of Owner's forces or any of its separate contractors are properly integrated, joined in an acceptable manner and performed in the proper sequence without any disruption or damage to the Work, the work or business operations of Owner or any work of Owner's forces or its separate contractors.

15.3 Coordination. Contractor shall provide for coordination of the activities of Contractor's, and Subcontractors' forces with the activities of Owner's forces and each of its separate contractors, as applicable, in accordance with the coordination plan established pursuant to **Section 4.20**.

15.4 Use of Job Site. Contractor shall afford all separate contractors reasonable opportunity for storage of their materials and equipment and for performance of their work on the Job Site. Owner shall direct all separate contractors to cooperate with Contractor and to avoid actions that could unreasonably interfere with the activities of Contractor.

15.5 Deficiency in Work of Owner and Separate Contractors. Without otherwise limiting Contractor's obligations under this Agreement, if part of Contractor's Work depends for proper execution or results upon construction or operations by Owner or another separate contractor of Owner, Contractor shall, prior to proceeding with that portion of the Work, promptly report to Owner any discrepancies or Defects in such other construction or operations that would render it unsuitable for proper execution and results by Contractor. The Parties shall resolve in good faith any such discrepancies or Defects or any disagreements relating thereto, and Owner shall correct or cause the separate contractor to correct its Defects and deficiencies. Failure of Contractor so to report discrepancies or Defects of which it has or upon reasonable investigation should have had knowledge shall constitute an acknowledgment by Contractor to Owner that Owner or separate contractor's completed or partially completed construction or operations are fit and proper to receive Contractor's Work, except as to discrepancies and Defects not then reasonably discoverable.

ARTICLE 16

INTELLECTUAL PROPERTY

16.1 Ownership/License.

16.1.1 Retain and Use. Subject to Owner's license rights hereunder and **Section 16.2**, Contractor warrants that it: (i) owns or controls or will have a license to use and license the Design Documents and the Information and the Intellectual Property therein contained; and (ii) has and will grant Owner all rights reasonably necessary for Owner to exercise the rights granted in this **Section 16.1**, all at no additional expense to Owner. Nothing contained in this Agreement shall be construed as limiting or depriving Contractor of its rights to use its knowledge and skill (but not Owner's Confidential Information) to design, construct or carry out other projects or work for itself or others, whether or not such other projects or work are similar to the Work to be performed pursuant to this Agreement. Contractor shall deliver copies of the Information to Owner in tangible, electronic, or other media format requested by Owner, which tangible, electronic, or other media form (but not the underlying intellectual property) will become the property of Owner upon receipt.

16.1.2 Assignment. Contractor hereby assigns, and shall cause all Subcontractors and other third parties to assign, automatically upon their creation, all right, title, and interest, including all copyright and other Intellectual Property rights, in the Design Documents to Owner. Such ownership interest shall extend only to the Design Documents themselves and not to any pre-existing Intellectual Property of Contractor or Subcontractors contained therein. Contractor shall mark all Design Documents as confidential and shall indicate Owner's ownership interests therein.

16.1.3 Irrevocable License. Contractor hereby grants to Owner an irrevocable, permanent, transferable, sublicensable, nonexclusive, fully assignable, royalty-free, paid-up license to copy, perform, display, and otherwise use the Information and Intellectual Property (including pre-existing Intellectual Property embedded in any Design Document) to allow Owner to operate, maintain, repair, train personnel, modify, improve, and/or alter the Facility, and any Component or replacement thereof. Owner has the right to retain, copy, execute, modify, create derivative works of, and use copies of the Information and the Intellectual Property and the information contained therein or related thereto for the foregoing purposes.

16.1.4 Proprietary Calculations. Upon request by Owner, Contractor will (and will cause all applicable Subcontractors to) provide any confidential or proprietary design calculations and other formulas not otherwise provided to Owner hereunder which may be needed by Owner in the operation, maintenance, repair, personnel training, modification, improvement, or alteration of or related to the Work, or any Component thereof, or in connection with any submission required by or to any Governmental Authority.

16.1.5 Non-exclusive License. Owner hereby grants Contractor a personal, limited, non-exclusive, and non-transferable license to use any proprietary information received from Owner for the sole purpose of performing the Work. The term of such

license shall end upon the earliest of: (i) conclusion of the Warranty Period; (ii) termination of this Agreement; or (iii) Owner's revocation of such license. Without Owner's prior written consent, any transfer of control of Contractor shall void such license. Contractor shall indemnify, hold harmless, and defend Owner from any misuse of the license rights granted in this **Section 16.1.5**.

16.2 Indemnity against Intellectual Property Infringement.

16.2.1 Indemnity. Contractor warrants that all Intellectual Property rights which may exist in the Information or other items furnished hereunder in connection with the Work are now (or will at their creation be) vested in Contractor (or that Contractor shall then have the right to grant to Owner the license and rights referred to in **Section 16.1**). Contractor shall defend, indemnify, and hold harmless Owner (and its Affiliates) against all Liabilities arising from any Claim for infringement or misappropriation of any Intellectual Property that either: (i) concerns any Work, including the Information and the licenses granted hereunder; (ii) is based upon or arises out of the performance of the Work; or (iii) is based upon or arises out of the Design or construction and use of any Work under this Agreement. Owner shall provide Contractor with reasonably prompt notice of any claim or legal action for infringement or misappropriation of any Intellectual Property.

16.2.2 Claim of Infringement. If there is any Claim of infringement or misappropriation described in **Section 16.2.1**, or if Contractor believes that it may be subject to such a Claim, Contractor shall promptly remedy such infringement, misappropriation or related injunction at its expense, in a way satisfactory to Owner, including: (i) replacing or modifying the allegedly infringing element(s) so that such element(s) becomes non-infringing without loss of functionality and without adversely affecting Unit operations and any license and rights granted to Owner hereunder, or (ii) securing for Owner the right to continue to use such element(s) without loss of functionality and without adversely affecting Unit operations and any license and rights granted to Owner hereunder.

16.3 Contractor's Responsibility for Litigation. If any Claim for infringement or misappropriation results in a Claim against Owner, Contractor shall, as an Indemnifying Party, undertake its indemnification obligations in accordance with **Section 20.3**.

16.4 Assistance. If Contractor has charge of any Claim brought against Owner, Owner, at Contractor's expense, shall render such assistance as Contractor may reasonably require in the defense of such suit; **provided**, that Owner has the right to be represented therein by counsel of its own choice and at its own expense.

16.5 Injunction. If Owner or Contractor is/are enjoined from completing the Work or any portion thereof or from the use, operation or enjoyment of the Work, or the Facility or any portion thereof or any permitted use of the Information or any Intellectual Property as a result of any Claim, Contractor shall exercise its best efforts to have such injunction removed at no cost to Owner. Any failure to secure removal of such injunction shall not constitute an Excusable Event Basis hereunder.

16.6 Contractor's Continuing Obligation. Neither the acceptance of the Work by Owner, including supplied Equipment, nor the issuance of any Certificate or Turnover Acknowledgment by Owner, will be construed to relieve Contractor of any obligation hereunder.

16.7 Limitations and Conditions. If any Claim for infringement arises, Contractor shall, at its option and at its expense, promptly in a way satisfactory to Owner: (i) procure for Owner the rights or (ii) modify the infringing item, so that such item becomes non-infringing or falls within the scope of the license right granted by Contractor to Owner. Furthermore, if such claim or legal action for infringement threatens to affect the operation of any of the Units or the Facility or any Component or other portion thereof in the reasonable judgment of Owner, Contractor shall promptly undertake the obligations set forth in the previous sentence. Contractor will have no liability as described in this **Article 16** for any Design, equipment, or process that Contractor is directed by Owner after the Effective Date to incorporate in the Facility, as to which Contractor has given prompt notice to Owner that such specified Design, equipment, or process infringes the Intellectual Property rights of a Third Party and thus such Work will not be included under the indemnity set forth in **Section 16.2**, together with a reasonable explanation thereof. The provisions of this **Article 16** shall apply to any allegation of infringement or misappropriation that occurs during the use of the Facility. The indemnification and other provisions of this **Article 16** shall survive the termination or expiration of this Agreement.

16.8 Availability of Intellectual Property. The rights and license granted under or pursuant to this Agreement by Contractor to Owner are, for all purposes of Section 365(n) of Title 11 of the United States Code, licenses or rights to "intellectual property" as defined therein. During the term of this Agreement, Contractor shall create and maintain current copies to the extent practicable of all such intellectual property or its embodiment, including the Design Documents and proprietary calculations. If a bankruptcy proceeding is commenced by or against Contractor under Title 11, Owner shall be entitled to a copy (including electronic format) of any and all such intellectual property and all embodiments of such intellectual property, and the same, if not in the possession of Owner, shall be promptly delivered to it: (i) upon Owner's written request following the commencement of such bankruptcy proceeding, unless Contractor, or its trustee or receiver, elects within thirty (30) Days to continue to perform all of its obligations under this Agreement or (ii) if not delivered as provided under **clause (i)** above, upon Owner's written request following the rejection of this Agreement by Contractor. If Owner has taken possession of all applicable embodiments of the intellectual property of Contractor pursuant to this **Section 16.8** and the trustee in bankruptcy of Contractor does not reject this Agreement, Owner shall return such embodiments upon request. If Contractor seeks or involuntarily is placed under Title 11 and the trustee rejects this Agreement as contemplated under 11 U.S.C. 365(n)(1), Owner hereby elects, pursuant to Section 365(n) to retain all rights granted to Owner under this Agreement to the extent permitted by Applicable Law.

ARTICLE 17

REPRESENTATIONS AND WARRANTIES

17.1 Contractor. Contractor hereby represents and warrants the following to Owner, on and as of the Effective Date, which representations and warranties shall survive the execution

and delivery of this Agreement, any termination of this Agreement and the final completion of the Work:

- (i) it is able to furnish the tools, Equipment, Consumables and Construction Aids, labor, supervision and demolition, Design and construction services required to complete the Work and perform its obligations hereunder, and has sufficient experience and competence to do so;
- (ii) it is a corporation duly organized, validly existing and in good standing under the laws of the State of Delaware;
- (iii) it is authorized to do business in the Commonwealth of Kentucky and is properly licensed by all Governmental Authorities having jurisdiction over it, the Work, or the Facility;
- (iv) Contractor is well acquainted with the Trimble County Generating Station Site, including the general and local conditions, as well as other conditions that may influence the performance of the Work, including the requirements of Applicable Law, the other construction activities that will be performed on the Trimble County Generating Station Site during performance of the Work, the condition of Existing Facilities on the Trimble County Generating Station Site that will be utilized, integrated into, interconnected with or modified in the performance of the Work and building standards and trade practices affecting the Work;
- (v) no litigation, investigation or proceeding of or before any arbitrator or Governmental Authority is pending against or, to the knowledge of Contractor, threatened against or affecting Contractor or any of its properties, rights, revenues assets or the Work (a) which could reasonably be expected to have a material adverse effect on the properties, business, prospects, operations or financial condition of Contractor or (b) which could reasonably be expected to have a material adverse effect on the ability of Contractor to perform its obligations under this Agreement;
- (vi) this Agreement has been duly authorized, executed, and delivered by it and constitutes the legal, valid, and binding agreement of Contractor, enforceable against Contractor in accordance with its terms; and
- (vii) the Parent Guarantee has been duly authorized, executed and delivered by Guarantor and constitutes the legal, valid and binding agreement of Guarantor, enforceable against Guarantor in accordance with its terms.

17.2 Individual Owners. Each Individual hereby represents and warrants the following to Contractor, on and as of the Effective Date, which representations and warranties shall survive the execution and delivery of this Agreement, any termination of this Agreement and the final completion of the Work:

- (i) it is duly organized, validly existing and in good standing under the laws of the state of its formation and is duly qualified to do business in the state of its formation

(and, with respect to LG&E and KU only, is duly qualified to do business in the Commonwealth of Kentucky);

- (ii) no litigation, investigation or proceeding of or before any arbitrator or Governmental Authority is pending against or, to its knowledge, threatened against or affecting it or any of its properties, rights, revenues, assets: (a) which could reasonably be expected to have a material adverse effect on the properties, business, prospects, operations or financial condition of it or (b) which could reasonably be expected to have a material adverse effect on its ability to perform its obligations under this Agreement; and
- (iii) this Agreement has been duly authorized, executed, and delivered by it and constitutes the legal, valid, and binding agreement of it, enforceable against it in accordance with its terms.

ARTICLE 18

CONFIDENTIAL INFORMATION

18.1 Confidential Information. Each Party has a proprietary interest in certain information that will be disclosed (either directly or through its engineer or others on its behalf) pursuant to this Agreement. Each Party shall keep in confidence any such information it receives that in good faith the disclosing Party believes is proprietary and which: (i) is specifically designated in writing as being “confidential” or (ii) is disclosed orally, visually or by way of consigned items, and is orally identified as “confidential” at the time of disclosure, which oral identification is confirmed in writing within ten (10) Business Days (“**Confidential Information**”). Each Party agrees not to disclose the other Party’s Confidential Information without the prior written permission of the other Party or use any such information for other than the purpose for which it is supplied, except as provided herein. Information relating to commercial terms of this Agreement shall also be treated as “Confidential Information;” **provided, however,** such restriction is intended only to prevent disclosure of the Contract Price, Performance Guarantees, outage schedules, limits of liability, liquidated damage amounts, warranty provisions, intellectual property provisions, wage rates and unit rates, and information obtained by Contractor subject to NERC Requirements, and is not intended to restrict Owner from use of the form of agreement. Each Party agrees that the other Party may disclose any Confidential Information to its (and its Affiliates’) officers, directors, employees, counsel, engineers, consultants, representatives and to such other persons or entities, including the Financing Parties and their Affiliates and potential Affiliates, as may be necessary to perform its obligations under this Agreement or any document related to the Facility or the Financing thereof to which it is a Party; **provided,** that it is responsible for requiring any Third Party to whom it wishes to disclose to comply with the terms of this **Section 18.1**. The provisions of this **Article 18** shall not apply:

- (a) to information which the receiving Party can substantiate:
 - (1) was in the possession of the receiving Party at the time it was initially furnished, without a breach of this provision;

- (2) is or becomes part of the public domain without a breach of this provision by the receiving Party;
- (3) is received from a Third Party who is, to the knowledge of the receiving Party, under no limitation or restriction regarding disclosure; or
- (4) is independently developed by or for the receiving party and not obtained, in whole or in part, from Confidential Information received from the disclosing party.

Such information shall not be deemed to be within one of the foregoing exceptions merely because it is embraced by more general information available on a non-confidential basis to the receiving Party.

- (b) to the extent that a receiving Party (a) is required to disclose information pursuant to Applicable Law, (b) discloses the information to the Kentucky Public Service Commission or other Governmental Authority, or (c) uses information in connection with any legal proceeding or Dispute under **Article 23** hereof; **provided**, that in such disclosure or use, the Party takes reasonable steps to make the other Party's Confidential Information subject to any available procedures for maintaining its confidentiality.

The Parties acknowledges that a violation of provisions of this **Section 18.1** by a Party would cause irreparable harm to the disclosing Party for which no adequate remedy at law exists. Each Party therefore agrees that, in addition to any other remedies available, the disclosing Party shall be entitled to seek injunctive relief to enforce the terms of this **Section 18.1**, including to prevent a breach or contemplated breach hereof, without, in any case, proof of actual damages or the posting of any bond or security, which posting is hereby waived to the fullest extent permitted by Applicable Law.

18.2 Import or Export of Technical Data. Contractor shall comply with Applicable Law regarding the import or export of technical data or information or any product based thereon and shall not ship or communicate or allow to be shipped or communicated, either directly or indirectly, any technical data or information or any product based thereon in connection with the Work to any country or from any country to or from which such shipment or communication is prohibited by Applicable Law.

18.3 Third Party Proprietary Information. Contractor also agrees to enter into confidentiality agreements with Third Parties at Owner's request and to keep in force confidentiality agreements concerning Third Parties' proprietary information, which agreements shall permit Contractor to use such parties' proprietary information solely in connection with the Work. Such agreements are to be consistent with current industry practices and will not contain provisions that preclude Contractor's participation in other projects or work.

18.4 Public Relations. Contractor agrees that all public relations matters arising out of or in connection with the Work shall be the sole responsibility of Owner. Contractor shall obtain Owner's prior written approval of the text of any announcements, publications,

photographs, or other type of communication concerning the Work which Contractor or Subcontractors wish to release for publication, which approval may be withheld in Owner's sole discretion.

ARTICLE 19

HAZARDOUS SUBSTANCES

19.1 Hazardous Substances.

19.1.1 Encountering Hazardous Substances. In order to give the Owner an opportunity to discover and, as appropriate remediate, any Pre-Existing Hazardous Substances, Contractor shall give Owner at least thirty (30) Days and no more than sixty (60) Days advance written notice before it commences disturbing any areas of the Job Site it has not previously disturbed. If, in the course of performance of the Work, Contractor either spills, leaks, or releases (including threatened releases) Hazardous Substances into the environment or encounters Hazardous Substances (or a substance it reasonably believes is a Hazardous Substance) on the Job Site except as contemplated by **Section 19.1.3**, or any other portion of the Trimble County Generating Station Site on which Work occurs, in such quantities or at such levels that may require investigation or remediation pursuant to Applicable Law, Contractor shall immediately suspend the Work in the area affected (except as provided below) and immediately orally report the condition to an individual on the Emergency Notification List and to the Owner Representative followed as soon as reasonably possible by a written notice to the Owner Representative. In any such event, the obligations and duties of the Parties are as follows:

- (i) Owner may direct Contractor to take appropriate immediate mitigating action;
- (ii) to the extent such condition involves: (a) a Hazardous Substance brought to or generated on or under the Job Site or the Trimble County Generating Station Site by Contractor or Subcontractors or any Person for whom either may be responsible; (b) a Hazardous Substance contained in or packed with Equipment; (c) a spill, leak, release, or threatened release caused by Contractor or a Subcontractor or any Person for whom either may be responsible of a Hazardous Substance that is properly contained and labeled (or other adequate warning is given of its existence); (d) a Contractor responsibility as provided in **Section 19.1.3**; or (e) the exacerbation of a Pre-Existing Hazardous Substance caused by the Culpable Conduct of Contractor, Subcontractors or any Person for whom either may be responsible, then any investigation, response, removal, cleanup, or other remedial action required (1) to restore the status quo ante and/or (2) by Applicable Law or any Governmental Authorities (collectively, "**Environmental Action**") shall be performed by Contractor.
- (iii) if the condition does not involve a Hazardous Substance in such quantities and/or at such levels that may require investigation or remediation pursuant

to Applicable Law, Contractor shall, promptly after receiving written notice from Owner authorizing Contractor to recommence activities in the subject area, resume the portion of the Work that had been suspended;

- (iv) if such condition involves a Pre-Existing Hazardous Substance then, except to the extent provided in **clause (ii)** above, any Environmental Action shall be performed by Owner at its expense. Contractor shall handle, remove, dispose of or remediate, as applicable, Contractor Hazardous Substances in compliance with Applicable Law; and
- (v) except as otherwise required by Applicable Law, any Environmental Action, notification and other communication with Third Parties, including Governmental Authorities, and reports and documentation related to such Environmental Action shall be undertaken by Owner.

19.1.2 Environmental Action. Contractor shall use diligent efforts to avoid any adverse effect on, or impediment to, the efforts undertaken by Owner, its agents, or independent contractors in connection with any Environmental Action or other remedial work Owner deems appropriate at the Job Site or the Trimble County Generating Station Site during the term of this Agreement. The Parties acknowledge and agree that Contractor shall not commence or continue any construction activities on any portion of the Job Site or the Trimble County Generating Station Site on, in, or under which Environmental Actions or other remedial actions are to be (or are being) performed until such actions are to the point where construction activities will not interfere with such actions, as evidenced by appropriate certifications from the applicable environmental engineer or remediation contractor and any required approvals of any applicable Governmental Authorities. Contractor agrees to use good faith diligent efforts to continue the unaffected portions of the Work and to adjust and schedule its activities at the Job Site or the Trimble County Generating Station Site so as to minimize, to the extent reasonably practicable, any adverse effect on the cost and progress of the Work resulting from the performance of any remedial actions.

19.1.3 Contractor Obligations. Contractor shall not generate, dispose, bring, transport, or store (and shall prohibit Subcontractors from generating, disposing, bringing, transporting, or storing) Hazardous Substances to or on the Job Site or the Trimble County Generating Station Site, and shall not utilize (and shall prevent Subcontractors from utilizing) any construction materials or equipment (whether or not totally enclosed) containing asbestos, polychlorinated biphenyls, benzene, lead or urea formaldehyde; **provided, however**, that Contractor (and Subcontractors) may use and store (if properly containerized, labeled and stored) in quantities reasonably necessary to perform the Work the following, but only in accordance with Applicable Law: gasoline, diesel fuel, fuel oil(s), gravel(s), lube oil(s), greases, sealant(s), combustible gases, form oil(s), solvent(s), adhesives, and all other materials, that are normally used or consumed in accordance with Professional Standards in or during construction or testing of similar facilities, equipment, and systems. Contractor shall not bring or store any other Hazardous Substances to the Trimble County Generating Station Site without the specific prior written authorization from Owner. Contractor shall provide Owner with Material Safety Data Sheets in English,



("MSDSs") properly completed covering any Hazardous Substance brought to the Trimble County Generating Station Site and furnished by Contractor (or Subcontractors). Contractor shall maintain on the Job Site, at all times, complete records and inventories, including MSDSs of materials described in this **Section 19.1.3** that are being used by it or Subcontractors, or any Persons for whose actions it or any Subcontractor is responsible on the Trimble County Generating Station Site. Contractor shall be responsible for the management, prompt removal, cleanup and off-site disposal of Hazardous Substances brought to or generated at the Trimble County Generating Station Site by Contractor, any Subcontractor or any Person for whose actions Contractor or any Subcontractor is responsible, including Hazardous Substances contained or packed in Equipment. In this regard, Contractor shall comply, and shall cause Subcontractors to comply, with all Applicable Law and the Hazardous Substances Management Plan. Contractor shall have ownership of, and title to, all contaminated media encountered or created in performing its obligations under **Section 19.1.1(ii)** and this **Section 19.1.3**, and shall have sole responsibility in responding to such conditions including complying with reporting obligations, providing for access restrictions and warnings, manifesting and any other obligations under Applicable Law. Reporting. Owner shall determine whether reporting is required under Applicable Law and shall initiate the reporting of conditions on the Job Site if required. Unless Owner provides written authorization, Contractor acknowledges and agrees that it shall not report, or cause any other Person to report, any information regarding environmental conditions to any Governmental Authority, except as required by Applicable Law. Contractor shall use its best efforts to afford Owner an opportunity to present all objections and defenses Owner or Contractor may have prior to the making of such report by Contractor. Contractor retains its obligation to report to Owner any conditions created by activities of Contractor, Subcontractors, or other Persons whose actions Contractor or any Subcontractor is responsible in the course of activities pursuant to this Agreement. Contractor shall be responsible for emergency notification to Owner, in accordance with **Sections 19.1.1** and **4.16**, as well as additional immediate and follow-up reporting with respect to any discharge, spill or release of a Hazardous Substance into the environment at the Job Site or the Trimble County Generating Station Site that occurs after the Effective Date arising out of performance of the Work.

19.1.5 Hazardous Substances Identified by Contractor. Contractor acknowledges that the process of integrating the Facility into each of the Units requires the identification and remediation of asbestos, lead paint, and possibly other Hazardous Substances from Unit structures that will be affected by the Work. Remediation of such Hazardous Substances will be the responsibility of Owner, but will be subject to the conditions set forth in this **Article 19**. Contractor shall perform such inspections of each of the Units as necessary prior to commencing any Work to integrate any portions of the Facility into the Unit or its structures. Contractor shall identify each specific area where Hazardous Substances (i) are or may be present; (ii) would be disturbed by performance of the Work involved in integrating the Facility into each of the Units; and (iii) that need to be remediated. Contractor shall carefully outline each specific area where remediation is to occur with brightly-colored spray paint. Contractor shall confine the marking of areas to the minimum area necessary to allow the Work to safely proceed. Such marking must clearly and distinctly identify and define the precise areas to be remediated. Contractor shall give Owner reasonable advance notice that it will be marking such areas and shall



deliver a written notice to Owner when it has finished marking and is ready for Owner to commence remediation. Owner will have no less than thirty (30) Days to complete such remediation. Upon completion of such remediation, Owner will notify Contractor that it may proceed with the planned Work for such areas. If, during the course of its Work in such areas, Contractor discovers additional areas where Hazardous Substances require remediation that it did not mark as required hereunder, Contractor shall mark such areas as provided in this **Section 19.1.5** and provide written notice to Owner to remediate Hazardous Substances in such areas. Owner will use commercially reasonable efforts to remediate such additional areas as soon as possible but in any case within a reasonable period of time. The cost of all such remediations will be borne by Owner; **provided, however**, if Owner is requested by Contractor to: (a) accelerate any remediation work to be performed by Owner under this **Section 19.1.5** or (b) remediate additional areas that Contractor did not mark at the time it marked other areas within the same general vicinity, Contractor shall be responsible for any incremental costs incurred on account of such acceleration or having to remobilize a Third Party contractor to perform such additional remediation. Notwithstanding anything in this Agreement to the contrary, Contractor is not entitled to any Adjustment of this Agreement, by Change Order or otherwise, on account of Hazardous Substances (all of which constitute Pre-Existing Hazardous Substances) identified or required to be identified by Contractor in accordance with this **Section 19.1.5**.

19.1.6 Labeling. Contractor and Subcontractors shall properly store, label and dispose of Hazardous Substances brought to, or generated at, the Trimble County Generating Station Site by Contractor or Subcontractors, and others for whom they are responsible, and shall train their respective employees in the safe usage and handling of Hazardous Substances, including any training that is required either by the Hazardous Substances Management Plan or Applicable Law.

ARTICLE 20

INDEMNIFICATION

20.1 Contractor's Indemnity. To the fullest extent permitted by Applicable Law, Contractor shall indemnify, defend, and hold harmless each Individual Owner, Owner Engineer, and the Financing Parties (and all of the Affiliates of all of the foregoing) and their respective successors, assigns, officers, directors, members, employees, agents, Affiliates, and representatives (collectively, the "**Owner Indemnitee(s)**"), from and against any and all Claims and any and all Liabilities (whether incurred as the result of a Third Party claim or a claim to enforce any indemnity obligation of Contractor) to the extent arising or resulting from, or occasioned by or in connection with: (i) Claims of Third Parties relating to performance by Contractor, Subcontractors, agents, or anyone directly or indirectly employed by them or anyone for whose acts they may be responsible, of the Work or Contractor's other duties or obligations under this Agreement, without regard to the legal theory underlying such Claims or Liabilities, including strict liability; (ii) Claims by any Governmental Authority arising from violations of Applicable Law by Contractor, Subcontractors, agents, or anyone directly or indirectly employed by them or anyone for whose acts they may be responsible, and rectification of the causes of such violations; (iii) Claims by any Governmental Authority for taxes that are the responsibility

of Contractor or any Subcontractor or any of their respective agents or employees with respect to any payment for the Work made to or earned by Contractor or any Subcontractor or any of their respective agents or employees under this Agreement; or (iv) enforcing their respective rights under this **Section 20.1**; **provided, however**, this indemnity shall not apply to the extent any such Claims or Liabilities arise or result from the Culpable Conduct of Owner. This indemnification, defense, and hold harmless obligation shall survive the termination or expiration of this Agreement until the expiration of the applicable statutes of limitation therefor. In Claims against any Owner Indemnitee under this **Section 20.1** by an employee of Contractor, a Subcontractor, anyone employed by them or anyone for whose acts they may be liable, the indemnification obligation under this **Section 20.1** is not limited by a limitation on the amount or type of damages, compensation or benefits payable by or for Contractor, a Subcontractor or any other above-referenced Person under employee compensation acts, disability benefit acts, or other employee benefit acts.

20.2 Owner's Indemnity. To the fullest extent permitted by Applicable Law, Owner shall indemnify, defend, and hold harmless Contractor (and its Affiliates) and their successors, assigns, officers, directors, employees, agents, and representatives (collectively, the "**Contractor Indemnitee(s)**"), from and against any and all Claims and any and all Liabilities to the extent arising or resulting from, or occasioned by or in connection with: (i) Claims of Third Parties relating to the performance by Owner of its duties and obligations under this Agreement, without regard to the legal theory underlying such Claims or Liabilities, including strict liability; (ii) Claims by any Governmental Authority arising from violations of Applicable Law by Owner, or anyone directly or indirectly employed by it or anyone for whose acts it may be responsible (other than Contractor or Subcontractors); (iii) Claims by any Governmental Authority for taxes that are the responsibility of Owner or any of their respective agents or employees with respect to any payment for the Work under this Agreement; or (iv) enforcing its rights under this **Section 20.2**; **provided, however**, this indemnity shall not apply to the extent any such Claims or Liabilities arise or result from the Culpable Conduct of Contractor Indemnitees. This indemnification, defense, and hold harmless obligation shall survive the termination or expiration of this Agreement until the expiration of the applicable statutes of limitation therefor. In Claims against any Contractor Indemnitee under this **Section 20.2** by an employee of Owner, anyone employed by it or anyone for whose acts it may be liable, the indemnification obligation under this **Section 20.2** is not limited by a limitation on the amount or type of damages, compensation or benefits payable by or for Owner or any other above-referenced Person under compensation acts, disability benefit acts, or other employee benefit acts.

20.3 Defense of Claims or Actions.

20.3.1 Notice. If any Claim is made or brought by any Third Party with respect to which an Owner Indemnitee or a Contractor Indemnitee entitled to indemnity under any indemnification provision of this Agreement, (individually, an "**Indemnified Party**" and collectively, the "**Indemnified Parties**") believes it is entitled to indemnification under any indemnification provision of this Agreement, the Indemnified Party shall give written notice of such Claim (a "**Claim Notice**") and a copy of the Claim, process and any legal pleading with respect thereto (if and to the extent available to the Indemnified Party) to the Party that is required to provide indemnification under this Agreement (individually, an "**Indemnifying Party**" and collectively, the "**Indemnifying Parties**") promptly, but in



each case within ten (10) Days of being served or otherwise informed of such Claim, process or legal pleading. Failure to give such notice in a timely manner will not diminish the indemnification obligations of the Indemnifying Parties under this Agreement except to the extent the failure or delay in giving such notice results in actual and material prejudice to the Indemnifying Party.

20.3.2 Assumption of Defense. The Indemnifying Parties shall have the right to assume the defense of any such Claim. If the Indemnifying Parties wish to assume the defense of such Claim, such assumption shall be evidenced by written notice to the Indemnified Parties. After such notice, the Indemnifying Parties shall engage independent legal counsel of reputable standing selected by such Indemnifying Parties and reasonably acceptable to the Indemnified Parties, to assume the defense and may contest, pay, or, subject to **Section 20.3.5**, settle or compromise any such Claim on such terms and conditions as the Indemnifying Party may determine. If the Indemnifying Parties assume the defense of any such Claim, the Indemnified Parties shall have the right to employ their own counsel, at their own expense; **provided, however**, if the Indemnified Parties have reasonably concluded and specifically notified the Indemnifying Parties that there may be specific defenses available to the Indemnified Parties which are different from or in conflict with those available to the Indemnifying Parties, then the Indemnified Parties will be entitled to retain independent counsel at the Indemnifying Party's expense to assume the defense of the Indemnified Parties.

20.3.3 Independent Counsel. If the Indemnifying Parties do not agree in writing to assume the defense of such Claim pursuant to **Section 20.3.2**, the Indemnified Parties may engage independent counsel of reputable standing selected by them to assume the defense and may contest, pay, settle or compromise any such Claim on such terms and conditions as the Indemnified Parties may determine; **provided, however**, that the Indemnified Parties shall not settle or compromise any Claim without the prior consent of the Indemnifying Parties if such Indemnifying Parties acknowledge in writing their liability for any Liabilities incurred or required to be paid in respect of such Claim and provide adequate assurances of their ability to satisfy any such Liabilities.

20.3.4 Cooperation. The Indemnified Parties and the Indemnifying Parties shall cooperate in good faith in connection with any common defense.

20.3.5 Settlement. The Indemnifying Parties shall not, except with the consent of the Indemnified Parties, enter into any settlement or consent to entry of any judgment that: (i) does not include as an unconditional term thereof the giving by the Person or Persons asserting such Claim to all Indemnified Parties of an unconditional release from all liability with respect to such Claim; (ii) includes a statement as to an admission of fault, culpability or failure to act by or on behalf of any Indemnified Party; or (iii) imposes any conditions, future obligations or limitations on any of the Indemnified Parties; **provided, however**, that consent by the Indemnified Parties to any settlement or consent to entry or judgment may be withheld at the Indemnified Parties' sole discretion except with respect to settlements with any Governmental Authority, for which the consent of the Indemnified Parties shall not be unreasonably withheld or delayed and in making such determination, the Indemnified Parties shall exercise its reasonable business judgment (without taking into



account the indemnity afforded hereby) consistent with usual and customary settlement terms, conditions and practices for the applicable Governmental Authority.

20.4 Liens. Without in any way limiting Contractor's right to pursue any Claim for non-payment of amounts due from Owner hereunder, Contractor hereby releases, disclaims and waives and will cause its Major Subcontractors, pursuant to exemptions of the "Kentucky Fairness in Construction Act" (K.R.S. 371.400 to 371.425), to release, disclaim, and waive any right under Applicable Law to make, file or pursue any Lien (whether statutory or otherwise) against the Work, the Facility, the Units or the Trimble County Generating Station Site (or any portion thereof) for any reason. Contractor shall notify Owner of all substantial Claims and promptly settle or pay any undisputed Claims of any and all Subcontractors. Contractor shall not suffer to exist and shall promptly discharge and bond over or otherwise obtain release of or from any actual or claimed stop notice, lien (statutory or otherwise), attachment, mortgage, pledge, hypothecation, assignment, deposit arrangement, encumbrance, charge, preference, priority or security agreement, Claim, judgment, levy, security interest or similar interests filed or arising in connection with the Work ("**Liens**"), including Liens of Subcontractors and others for whom Contractor is responsible, and shall indemnify, defend, and hold harmless Owner, its Affiliates, and the Financing Parties (the "**Lien Indemnitees**") from and against all costs, charges and expenses including attorneys' fees and charges, and pre- and post-judgment interest that any Lien Indemnitee may incur resulting from or arising out of any such Liens. Contractor's obligations with respect to Liens covered by this **Section 20.4** are subject to the following terms:

- (i) the provisions of **Section 20.3** shall apply as if the Lien Indemnitee is an Indemnified Party and Contractor is the Indemnifying Party thereunder;
- (ii) Contractor is not liable for any additional expenses resulting from the appropriate Lien Indemnitee failing to reasonably cooperate in the defense of any such Liens at Contractor's expense; and
- (iii) Contractor has sole control of the defense and settlement of any such Liens; **provided**, that Contractor shall first promptly confirm in writing its obligation to indemnify, defend, and hold Lien Indemnitees harmless from and against all Liabilities with respect to such Lien. Contractor shall promptly satisfy or otherwise discharge any such Liens filed against any Lien Indemnitee, the Work, the Existing Facilities (or any portion thereof), the Facility, or upon any Equipment or structures encompassed therein, or upon the premises upon which they are located. If Contractor fails to promptly (but in no event later than thirty (30) Days after the filing or creation of same or such earlier time as may be necessary to prevent the imminent sale, foreclosure, or other title divestiture of any Lien Indemnitee's property), bond over, satisfy or otherwise discharge such Liens, Owner may, but shall not be obligated to promptly notify Contractor in writing that it is taking any action to satisfy, defend, settle, or otherwise remove such Lien at Contractor's expense, including attorneys' fees and charges. Owner shall have the right but not the obligation to: (a) deduct any such expenses from any payment due, or which may become due, to Contractor or (b) use or draw upon the Contract Security therefor and/or (c) collect from Contractor any balance remaining. Contractor shall have the right to contest any such Liens; **provided**, that it first provides to Owner



(on behalf of the Lien Indemnitees) a bond to assure payment reasonably satisfactory to Owner, in the amount of such Liens.

ARTICLE 21

INSURANCE

Contractor (and Subcontractors) shall provide and maintain the insurance specified in **Exhibit I** in accordance with the terms and provisions thereof.

ARTICLE 22

TITLE AND RISK OF LOSS

22.1 Transfer of Title. Transfer of title to the Work (or any portion thereof, including Equipment and Design) will pass to Owner upon the earliest of: shipment to the Job Site; delivery to Owner or the Job Site; incorporation into the Work or the Unit; upon payment of the amount properly due under an Application for Payment covering such Work (less any amount withheld by Owner in accordance with the terms of this Agreement); or identification of the items of Equipment to be provided under the Agreement to Owner; **provided**, that Contractor shall cause title to be transferred to Owner at shipment of the Work to Owner or the Job Site to the extent that Owner reasonably requests. The transfer of title does not relieve Contractor of its obligation to provide and pay for all transportation and storage in connection with the Work. Contractor shall transfer title to Owner to the Work, including Equipment, free and clear of all Liens, except for those Liens that have been created by Owner. Passage of title will not affect the allocation of risk of loss. Title to documents, submittals, reports, Design Documents (whether hard copy, electronic or other medium) shall pass to Owner on the earlier of receipt or access to such Information.

22.2 Title Warranty. Contractor warrants that upon passage of title to the Work in accordance with **Section 22.1**, Owner will have good and indefeasible title to such Work, free and clear of Liens (other than Liens created by Owner) or other defects in title. If any Work is replaced under **Article 12, 13, or 16**, Owner's title shall vest in the replacement Work upon the earliest of payment therefor, its arrival at the Job Site or incorporation into the Work or the Existing Facilities. In the event of any nonconformity with this warranty, Contractor, at its own expense, upon written notice of such failure, shall indemnify and hold Owner harmless from the consequences of and defend the title to such Work and, if necessary, shall promptly replace such Work and any other affected portion of the Work, and such obligation shall survive the expiration, cancellation or termination of this Agreement.

22.3 Risk of Loss. Notwithstanding anything else to the contrary herein, except as otherwise provided herein, care, custody and control of each Subproject and the risk of loss or damage to that Subproject will pass to Owner upon achievement of Commercial Operation for that Subproject, and Owner hereby releases Contractor from bearing such risk with respect to such Work after such date. For Work performed or provided with respect to a Subproject from and after Commercial Operation of that Subproject, risk of loss shall pass to Owner as such Work is, completed. Contractor shall replace, repair, or reconstruct the Work, including Equipment

intended for the use of or necessary to the completion of the Work and furnished by Contractor or Subcontractors or any other Person that is lost, damaged, or destroyed prior to transfer of care, custody, and control and risk of loss of such Work to Owner. Contractor shall be responsible to assure safe delivery of all Equipment, Consumables, Construction Aids, and other items to the Job Site.

22.4 Contractor Tools. Risk of loss or damage to the equipment, tools, and Construction Aids of Contractor, its employees or Subcontractors and their employees will at all times remain with Contractor, Subcontractors and their respective employees. Contractor hereby releases Owner and will require all Subcontractors to release Owner from and against any Liabilities for loss or damage in respect thereof. If any loss or casualty to such equipment, tools, or Construction Aids occurs, the loss as a consequence thereof will not be the responsibility of Owner hereunder. Contractor or Subcontractors must adequately insure Construction Aids brought to the Trimble County Generating Station Site or the Job Site against loss and casualty.

ARTICLE 23

DISPUTE RESOLUTION

23.1 Resolution. If either Party believes a Dispute cannot be resolved by the Parties' Authorized Representatives, that Party may, by notice to the other escalate the Dispute to a Senior Officer from each Party for resolution by mutual agreement between the Senior Officers. Any agreed determination by the Senior Officers shall be final and binding upon the Parties. However, if the Senior Officers do not arrive at a mutual decision as to the Dispute within thirty (30) Days (or such longer time as the Parties agree) after notice is given seeking escalation, either Party may pursue any other available remedy at law or in equity in accordance with **Section 25.1**. For purposes of this Agreement, the term "Senior Officer" means the chief executive officer, president or any senior or executive vice president of a Party; provided, that Senior Officer cannot have been actively involved in discussions with the other Party regarding the Dispute prior to the escalation.

23.2 Continuation of Work. Pending final resolution of any Dispute, Contractor shall proceed diligently with the performance of its duties and obligations under this Agreement, and Owner shall continue to make undisputed payments in accordance with this Agreement.

ARTICLE 24

TERMINATION

24.1 Termination for Convenience.

24.1.1 Termination. Owner may terminate this Agreement, in whole or in part, without cause upon written notice to Contractor, specifying the extent to which this Agreement is terminated and the date on which such termination is to be effective. If this Agreement is so terminated, Contractor shall cease performance of the Work (or the terminated portion thereof) on the date specified in such notice. Upon such termination, Contractor and Subcontractors shall place no further subcontracts, including lease and

rental agreements, or purchase orders, for Equipment, Consumables, facilities, or services, including craft labor, except as may be necessary for completion of the portion of the Work not terminated by Owner. Upon request by Owner, Contractor shall promptly provide Owner a listing of all Subcontracts which pertain to the performance of the terminated Work, and shall furnish Owner with complete copies thereof. Contractor shall, at Owner's request, preserve and protect the Equipment and Consumables purchased for or committed to the terminated Work (whether completed or in progress and whether or not delivered to the Job Site or on order), the facilities on the Job Site, and Work in progress and completed Work (whether at the Job Site or at other locations), pending Owner's instructions. With respect to the terminated Work, Contractor shall promptly make every reasonable effort to mitigate the amount of Owner's liability upon termination, including cancelling associated Subcontracts upon terms satisfactory to Owner and taking such other action with respect to same as may be directed by Owner. If this Agreement is so terminated, Contractor, as its sole and exclusive remedy hereunder, shall be entitled to an amount equal to: (i) the amounts set forth in **Exhibit C** for milestones properly completed by Contractor; (ii) with respect to any partially completed milestone, amounts determined by multiplying the percentage of properly completed Work with respect to such milestone by the respective value of such milestone as set forth in **Exhibit C**; (iii) reimbursement for: (a) all cancellation charges necessarily incurred by Contractor in relation to Subcontractors; (b) an amount equal to other reasonable termination related actual costs necessarily incurred by Contractor; and (c) any reasonably incurred actual costs of Job Site demobilization, less: (1) amounts previously paid to Contractor with respect to the Work, (2) the sale or salvage value of Equipment and Consumables purchased for the Work and sold or retained by Contractor, and (3) amounts properly withheld under this Agreement. Notwithstanding the foregoing, in no event shall the amount required to be paid to Contractor hereunder as a consequence of termination together with amounts that Owner has previously paid to Contractor under this Agreement exceed the amount shown on the termination payment schedule as set forth in **Exhibit B** corresponding to the date of termination. Contractor shall calculate amounts due pursuant to this **Section 24.1**, and shall submit an Application for Payment in accordance with **Article 8**, which amounts are subject to audit and confirmation by Owner on a completely open-book basis.

24.1.2 Assumption. Notwithstanding anything to the contrary herein, upon a termination under this **Article 24**, Owner, in lieu of the payment of any Subcontractor's cancellation charge pursuant to **Section 24.1.1**, may, upon request, assume all of Contractor's obligations under such Subcontract. Contractor shall promptly provide Owner with a copy of Subcontract(s) requested by Owner and an estoppel certificate stating all known unsatisfied Liabilities under such Subcontracts. Thereafter, upon Owner's request, Contractor shall assign all of its right, title and interest in any such Subcontract to Owner. Such assignments shall be in form and substance satisfactory to, and at no additional cost to, Owner. Such agreements shall be in full force and effect upon such assignment. Contractor covenants that a provision substantially similar to this **Section 24.1.2** shall be inserted in each agreement with Subcontractors to preserve the rights of Owner under this **Section 24.1.2**.

24.1.3 Mitigation. Contractor shall use its reasonable best efforts to minimize the amount of any payment due to Contractor from Owner in accordance with **Section 24.1.1**.

24.2 Termination by Owner for Cause.

24.2.1 Default by Contractor. The occurrence of any one or more of the following, and, with respect to **clauses (ii), (iv), or (vi)**, the continuation of the same for thirty (30) Days after Contractor's receipt of written notice thereof from Owner, will constitute a default by Contractor under this Agreement (a "**Contractor Default**"); **provided**, that with respect to **clauses (ii), (iv), or (vi)**, if such Contractor Default cannot reasonably be cured within such thirty (30) Day period, such cure period shall extend for a total of sixty (60) Days, so long as Contractor continuously and diligently pursues a cure throughout such period:

- (i) Contractor or Guarantor experiences an Insolvency Event;
- (ii) the material breach of any representation or warranty made by Contractor herein;
- (iii) Contractor attempts to assign, convey or transfer this Agreement or any interest or right herein without Owner's prior written consent, except as otherwise permitted by this Agreement;
- (iv) Contractor fails to materially observe or perform any other covenant, agreement, obligation, duty or provision of this Agreement;
- (v) the interest of Contractor in this Agreement passes to any Person otherwise than as permitted herein;
- (vi) Contractor fails to make prompt payment to Subcontractors of amounts due for labor, Equipment, Consumables, or Construction Aids;
- (vii) Contractor disregards laws or ordinances or the lawful requirements of any competent authority or the instructions of Owner consistent with this Agreement;
- (viii) Contractor abandons the Work or fails, neglects, refuses or is unable at any time during the course of the Work to provide ample Equipment, Consumables, or Construction Aids, or labor to perform Work in accordance with the Major Contract Milestones or to provide a recovery plan to satisfaction of Owner, including failure to successfully complete the Performance Guarantee Tests;
- (ix) Contractor fails to comply with **Article 21 (Insurance)** or the Parent Guarantee, for any reason, ceases to be valid or enforceable in any way, the Guarantor experiences an Insolvency Event, or Guarantor fails to perform any material covenant or obligation in the Parent Guarantee;
- (x) Contractor fails to achieve Commercial Operation for a Subproject within one hundred fifty (150) Days of the Guaranteed Commercial Operation Date for that Subproject; or



- (xi) Contractor fails to achieve Final Completion for a Subproject on or before the Guaranteed Final Completion Date for that Subproject.

24.2.2 Owner's Remedies. Upon the occurrence of a Contractor Default, Owner may, without prejudice to any other right or remedy Owner may have: (i) terminate this Agreement; (ii) take possession of the Job Site and of all materials, equipment, tools, machinery and Information owned or held by Contractor for purposes of completing the Work; (iii) finish the Work and complete performance of other unperformed obligations by whatever method Owner may deem reasonable and expedient under the circumstances; and (iv) use or draw upon the Contract Security and/or withhold amounts due to Contractor. If the unpaid balance of the Contract Price exceeds Owner's cost of finishing the Work and completing performance of other unperformed obligations, then Contractor will be paid for all Work properly performed by Contractor to the date of termination (which amount will in no event exceed the difference between the unpaid portion of the Contract Price and Owner's cost of completing the Work and other obligations). However, if the cost of finishing the Work (including the cost of arranging for completion of the Work on comparable terms and conditions, including damages and remedies, and performing such Work on an accelerated basis to preserve as nearly as possible adherence to the Major Contract Milestones) and performing Contractor's other obligations under this Agreement exceeds the unpaid balance of the Contract Price, Contractor shall immediately pay the difference to Owner on demand upon receipt of periodic invoices from Owner. Owner will be entitled to withhold further payments to Contractor until the Work and other obligations have been completed and a determination that Contractor is entitled to further payments. Any amounts not paid hereunder when due will bear interest at the Agreed Rate. Owner may in its discretion employ such other Persons to finish the Work by whatever method or means as Owner in its sole discretion may deem expeditious; **provided**, that the balance of Work and obligations will be completed utilizing reasonable methods of construction management and construction consistent with the Major Contract Milestones. If this Agreement is terminated pursuant to this **Section 24.2.2** and is later determined or adjudged that no Contractor Default had occurred, such termination shall be deemed to be a termination pursuant to **Section 24.1.1**.

24.3 Termination by Contractor for Cause.

24.3.1 Default by Owner. The occurrence of any one or more of the following matters, and, with respect to **clauses (ii) or (iii)**, the continuation of the same for thirty (30) Days after Owner's receipt of written notice thereof from Contractor, will constitute a default by Owner under this Agreement (an "**Owner Default**"); **provided**, that with respect to **clauses (ii) or (iii)**, if such Owner's Default cannot reasonably be cured within such thirty (30) Day period, such cure period shall extend for a total of sixty (60) Days, so long as Owner continuously and diligently pursues a cure throughout such period:

- (i) Owner experiences an Insolvency Event;
- (ii) the breach of any material representation or warranty made by Owner herein; and

- (iii) Owner fails to observe or perform any material covenant, agreement, obligation, duty or provision of this Agreement, including timely payment, but excluding any such failure that is compensable pursuant to **Section 9.1** hereof.

24.3.2 Contractor's Remedies. During the continuance of an Owner's Default, but subject to **Section 23.2**, Contractor may suspend its performance of the Work or, if the suspension continues for fifteen (15) Days, terminate this Agreement. If this Agreement is so terminated by Contractor for an Owner Default, Contractor, as its sole and exclusive remedy hereunder, shall be entitled to receive an amount calculated in accordance with **Section 24.1**.

24.4 Suspension of the Work. Owner may, without cause, order Contractor to suspend the Work or extend the Major Contract Milestones in whole or in part for such period of time as Owner may determine. Any such suspension or extension will commence as soon as reasonably possible, but no later than the second (2nd) Day after Contractor's receipt of written notice thereof from Owner. Such suspension or extension shall continue for the period specified in Owner's notice to Contractor, as amended by Owner from time to time. Contractor will resume any suspended Work within three (3) Days of Owner's written notice directing the same. Without limiting Owner's rights under **Section 24.1**, should a suspension of the entire Work which is ordered by Owner pursuant to this **Section 24.4** (but excluding any suspension caused by a Force Majeure) continue for three hundred sixty (360) or more consecutive Days, either Party may thereafter terminate this Agreement by written notice to the other Party and the rights and remedies of Contractor will be the same as those which are expressed in **Section 24.1** hereof in the event of termination for convenience by Owner. In the case of any suspension of the entire Work under this **Section 24.4**, except to the extent an acceleration of the Work is authorized by Owner, the Major Contract Milestones will be extended by a period equal to the suspension period, and adjusted by Owner, in consultation with Contractor, to account for same. In the case of any suspension or extension of a portion of the Work under this **Section 24.4**, the Major Contract Milestones shall be extended only to the extent the suspension or extension can be shown to affect the critical path. This analysis will be based on the most current Project Schedule in effect on the Day of suspension and take into account the critical path for completing the entire Work and the non-critical path activities suspended or extended. Owner shall pay Contractor in accordance with the terms of payment set forth in this Agreement upon receipt of an Application for Payment for the Work completed prior to the time of any suspension and, during the period of suspension, for the direct reasonable costs that result from Contractor's compliance with the suspension notice. Owner shall pay Contractor the direct reasonable costs associated with the restart of suspended Work under this **Section 24.4** and shall resume payments to Contractor in accordance with the terms of payment under this Agreement thirty (30) Days after the restart of the Work. It is a precondition to all Claims by Contractor for extension or compensation under this **Section 24.4**, that the same be made within thirty (30) Days after the suspension period has ended, or said Claim is forever barred.



ARTICLE 25

MISCELLANEOUS PROVISIONS

25.1 Governing Law. This Agreement is governed by, and construed in accordance with, the laws of the Commonwealth of Kentucky without reference to the conflict of laws rules thereof. Each of the Parties hereby agrees that any legal proceedings that may arise under this Agreement shall be brought in the United States District Court for the Western District of Kentucky, located in Louisville (and if such court does not have jurisdiction over a matter at controversy between the Parties, any state court located in Louisville, Kentucky). Accordingly, each of the Parties hereby submits to the jurisdiction of the United States District Court for the Western District of Kentucky, located in Louisville (and if such court does not have jurisdiction over a matter at controversy between the Parties, any state court located in Louisville, Kentucky) for purposes of all legal proceedings that may arise under this Agreement. Each of the Parties irrevocably waives, to the fullest extent permitted by Applicable Law, any objection which it may have or hereafter have to the personal jurisdiction of such court or the laying of the venue of any such proceeding brought in such a court and any Claim that any such proceeding brought in such a court has been brought in an inconvenient forum. Each of the Parties to this Agreement hereby consents to process being served in any such proceeding by the mailing of a copy thereof by certified mail, postage prepaid, to its address specified in **Section 25.5** (as it may be changed or provided herein). EACH OF THE PARTIES HEREBY KNOWINGLY, VOLUNTARILY, AND INTENTIONALLY WAIVES ANY RIGHTS IT MAY HAVE TO A TRIAL BY JURY IN RESPECT OF ANY LITIGATION ARISING OUT OF, UNDER, OR IN CONNECTION WITH, ANY OF THE TRANSACTION AGREEMENTS OR ANY OTHER DOCUMENTS ENTERED INTO IN CONNECTION THEREWITH, OR ANY COURSE OF CONDUCT, COURSE OF DEALING, STATEMENTS (WHETHER VERBAL OR WRITTEN), OF THE PARTIES THERETO.

25.2 Entire Agreement. Notwithstanding any agreement that either Owner or their respective Affiliates have with Contractor or any of its Affiliates to the contrary, this Agreement represents the entire agreement between Owner and Contractor with respect to the subject matter hereof, and shall supersede all prior negotiations, binding documents, representations or other agreements, whether written or oral. This Agreement may be amended or modified only by a written instrument signed by Owner and Contractor as appropriate. Contractor and/or one or more of its Affiliates may now, may have in the past and/or may in the future be a party to a general agreement with Owner and/or one or more of its Affiliates for the purpose of setting forth certain default terms that are intended to form part of most contracts between them. Contractor and Owner hereby acknowledge and explicitly agree that neither such general agreement nor any such default terms shall apply with respect to this Agreement.

25.3 Successors and Assigns. Contractor may not assign, convey, or transfer this Agreement, or any part thereof, without Owner's prior written consent. This Agreement is binding upon, and inures to the benefit of, the successors and permitted assigns of the Parties. Each Individual Owner may assign, novate or declare any trust of the whole or any part of its interest in this Agreement and any benefit, interest, right or cause of action arising under this Agreement to an Affiliate or to a Third Party with comparable technical and financial abilities.

25.4 Contractual Relationship. Nothing contained in this Agreement may be construed as creating a contractual relationship of any kind: (i) between Owner and any Subcontractor (except as provided in **Section 3.6, Section 13.4, and Section 24.1.2** hereof) or (ii) between any Persons other than Owner and Contractor. Contractor is an independent contractor and all of its agents and employees shall be subject solely to the control, supervision, and authority of Contractor. Owner and Contractor disclaim any intention to create a partnership or joint venture. Contractor may not act for or have any power or authority to assume any obligation or responsibility on behalf of Owner.

25.5 Notices. All notices pertaining to this Agreement (“Notices”) must be in writing, signed by a duly authorized representative of the Party giving such notice and will be deemed given when received by personal delivery, recognized express courier, or electronic mail (immediately followed by recognized express courier) to the other Party at the address designated below:

If to Owner:

Louisville Gas and Electric Company
820 W. Broadway
Louisville, KY 40202
Attn: Joan Lipp
Telephone: 502-627-2074
E-mail: joan.lipp@lge-ku.com

With required copies to:

Louisville Gas and Electric Company
820 W. Broadway
Louisville, KY 40202
Attn: Tony Ruckriegel
Telephone: 502-627-4690
E-mail: tony.ruckriegel@lge-ku.com

Louisville Gas and Electric Company
220 W. Main St.
Louisville, KY 40232
Attn: Jim Huguenard
Telephone: 502-627-4802
E-mail: jim.huguenard@lge-ku.com

and;



Trimble County CCRT
Engineering, Procurement, and Construction Agreement

LG&E
KU

If to Owner and the notice pertains to indemnification, settlement of Claims, default, termination, Dispute resolution or an Excusable Event Basis and associated documentation under **Section 9.1** with a Claim value greater than Two Hundred Fifty Thousand Dollars (\$250,000) or an impact on the Major Contract Milestones of greater than five (5) Days, Contractor shall also provide mandatory copies of Notice to:

Louisville Gas and Electric Company
820 W. Broadway
Louisville, KY 40202
Attn: Scott Straight
Telephone: 502-627-2701
E-mail: scott.straight@lge-ku.com

Louisville Gas and Electric Company
220 W. Main St.
Louisville, KY 40232
Attn: General Counsel
Telephone: 502-627-3297
E-mail: gerald.reynolds@lge-ku.com

If to Contractor:

Amec Foster Wheeler Kamtech, Inc.
Lakeside Center, 1979 Lakeside Parkway
Suite 400
Tucker, GA 30084
Attn: Jay McGill
Project Manager
Telephone: 770- 688-2500
E-mail to: jay.mcgill@amecfw.com

With required copies to:

Amec Foster Wheeler Kamtech, Inc.
Lakeside Center, 1979 Lakeside Parkway
Suite 400
Tucker, GA 30084
Attn. Bill Endres
Director of Projects
Telephone: 770- 688-2500
E-mail: bill.endres@amecfw.com

Trimble County CCRT
Engineering, Procurement, and Construction Agreement

LG&E
KU

Amec Foster Wheeler E&C Services, Inc.
525 N. Tryon St.
Suite 1600
Charlotte, NC 28202
Attn: James Bunta
VP, Legal
Telephone: 704-331-3907
E-mail: James.bunta@amecfw.com

Addresses for a Party may be changed by that Party effective upon receipt of notice of such address change by the other Parties.

25.6 Rights Cumulative. Except as otherwise expressly provided or limited in this Agreement: (i) rights and remedies available to Owner or Contractor as set forth in this Agreement are cumulative with and in addition to, and not in limitation of, any other rights or remedies available to such Parties at law or in equity and (ii) any specific right or remedy conferred upon or reserved to Owner or Contractor in any provision of this Agreement will not preclude the concurrent or consecutive exercise of a right or remedy provided for in any other provision hereof.

25.7 Incorporation by Reference. The recitals set forth on the first page of this Agreement are hereby incorporated into this Agreement by this reference and expressly made a part of this Agreement.

25.8 No Waiver. No course of dealing or failure of Owner or Contractor to enforce strictly any term, right or condition of this Agreement may be construed as a waiver of such term, right or condition. No express waiver of any term, right or condition of this Agreement will operate as a waiver of any other term, right or condition.

25.9 Agreed Rate. All amounts that become due hereunder but remain unpaid will bear interest at an annual (365 or 366 Days, as appropriate) rate equal to the lesser of: (i) two percent (2%) in excess of the Prime Rate and (ii) the maximum rate permitted by Applicable Law (the "Agreed Rate").

25.10 Financing Cooperation. Contractor shall provide such reasonable assistance and cooperation to Owner as may be necessary for Owner to secure Financing for the Facility, including developing and providing information regarding the Work reasonably available to Contractor; making presentations to potential Financing Parties, their consultants and representatives; and responding to any questions or requirements asked or imposed by any Financing Parties. Contractor hereby consents to the collateral assignment of this Agreement to the Financing Parties. Contractor also agrees to enter into a consent to collateral assignment with the Financing Parties regarding this Agreement, which consent will contain such provisions as are typically provided to the Financing Parties, including giving the Financing Parties financial information of Contractor reasonably satisfactory to Financing Parties, copies of certain notices delivered to Owner hereunder, and affording the Financing Parties an independent right



to cure any Owner's Defaults hereunder. Contractor shall also provide customary legal opinions, which may be required to be from outside counsel, as required by the Financing Parties.

25.11 Audit. Contractor shall maintain (and shall cause Subcontractors to maintain): (i) the Basis of Bid, (ii) complete and accurate financial books and records to allow compliance with **Section 8.2** and **Section 20.4**, or which relate to any cost-based (*i.e.*, Work not covered by lump-sum prices) components of the Work billed under this Agreement or relating to the quantity of units billed under any unit pricing agreed to by the Parties and amounts in respect of a payment made pursuant to **Section 24.1**; and (iii) complete and accurate books and records relating to Contractor's obligations with respect to Hazardous Substances, health and safety, environmental management, emergency response, testing and inspection of Equipment, quality control (including non-conformance reports and disposition reports), violations of Applicable Law, NERC Requirements, Performance Guarantee Tests, and the requirements of **Sections 25.23** and **25.24** (all the foregoing hereinafter referred to as "**Records**") for a minimum of five (5) years following Final Completion of the last Subproject to achieve Final Completion. All such Records must be open to inspection and subject to audit and reproduction during normal working hours by Owner or its respective authorized representatives. For the purpose of evaluating or verifying actual or claimed costs, Owner and its respective authorized representatives will have access to Records at any time, including any time after final payment by Owner to Contractor pursuant to this Agreement. Owner and its respective authorized representatives shall have access, during normal working hours, to all necessary Contractor facilities. Contractor shall provide adequate and appropriate work space to conduct audits pursuant to this **Section 25.11**. Owner shall give Contractor reasonable notice of the date and time they, any Individual Owner or any agent of any of them intend to commence any audit. If the audit should disclose an overbilling, Contractor will pay for the cost of the audit and the amount of such overbilling within thirty (30) Days of receipt of Owner's invoice. The rights of Owner set forth in this **Section 25.11** shall survive the termination or expiration of this Agreement. Owner's right to audit under this **Section 25.11** does not include the right to audit the initial make-up or components of any agreed multipliers, rates, mark-ups, or fixed percentages, but does include the right to audit subsequent changes to such multipliers, rates, and mark-ups. Owner's rights under this **Section 25.11** include the right to audit the application of such multipliers, rates, mark-ups, or fixed percentages.

25.12 Survival. Articles 7, 13, 16, 17, 18, 19, 20, 23 and 25 and Sections 4.39, 8.9.2, and 22.2 of this Agreement and all other Articles and Sections thereunder providing for indemnification, or limitation of or protection against liability of either Party, will survive the termination, cancellation or expiration of this Agreement.

25.13 No Third Party Beneficiaries. The provisions of this Agreement are intended for the sole benefit of Owner and Contractor and, except to the extent specifically identified herein, there are no third party beneficiaries other than assignees and indemnitees contemplated by the terms herein.

25.14 Non-Recourse. LG&E is the agent of the Individual Owners for purposes of administering this Agreement and managing the obligations of Owner hereunder and Contractor may rely on communications from such agent as if received from all of the Individual Owners. When acting in its capacity as agent of the Individual Owners, LG&E is acting only in that

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capacity and not in its individual capacity. Anything to the contrary notwithstanding, the obligations of the Individual Owners under this Agreement are (i) the several (and not joint) obligations of each Individual Owner in respect of each such Individual Owner's undivided ownership interest in the applicable Subproject from time to time (which for the Bottom Ash Subproject is currently seventy five percent (75%) for LG&E, twelve and twelve one hundredths percent (12.12%) for IMEA, and twelve and eighty eight one hundredths percent (12.88%) for IMPA and for the other Subprojects is currently thirty-nine percent (39%) for LG&E, thirty-six percent (36%) for KU, twelve and twelve one hundredths percent (12.12%) for IMEA, and twelve an eighty eight one hundredths percent (12.88%) for IMPA), (ii) are special obligations of each Individual Owner and do not constitute obligations of (and no recourse shall be had with respect thereto to) (a) LG&E in its capacity as agent of Owner or (b) any shareholder of an Individual Owner, any Affiliate of an Individual Owner, or any shareholder, partner, member, officer, director, commissioner or employee of any such Person (collectively "Related Persons") and (iii) no action shall be brought or maintained against (a) any such Related Person or (b) LG&E, in its capacity as agent of Owners. The Parties acknowledge and agree that any provision of this Agreement that limits, excludes or protects against any liability of Owner, grants indemnity or confers rights or remedies that are intended to benefit (and be enforceable by) Owner, shall be applicable to LG&E, in its capacity as agent of Owner, and to Related Persons whether or not specifically referenced in such provision. At such time as an Individual Owner transfers its undivided ownership interest in a Subproject to another Individual Owner or a permitted assignee under **Section 25.3**, as the case may be, the Owner shall deliver a notice to Contractor advising Contractor of such Individual Owner's new undivided ownership interest in Unit 1. At such time as an Individual Owner assigns all of its rights under this Agreement to a permitted assignee under **Section 25.3**, such Individual Owner will be released from all obligations and liabilities arising thereafter under this Agreement.

25.15 Parent Guarantee. Owner's obligation to make any payment to Contractor hereunder is subject to the receipt of the Parent Guarantee executed by the Guarantor substantially in the form attached hereto as **Exhibit F-8**, guaranteeing the full and timely payment and performance of all of Contractor's obligations under this Agreement. Contractor covenants that the Parent Guarantee will remain in full force and effect to and until the obligations of Contractor under this Agreement have been fulfilled.

25.16 Provisions Required by Law. Any term or condition required to be contained in this Agreement as a matter of Applicable Law which is not so contained herein is deemed to be incorporated in this Agreement as though originally set forth herein.

25.17 Severability. If any provision of this Agreement, or the application thereof to any Person or circumstance, is to any extent held invalid or unenforceable by a court of competent jurisdiction, the remainder of this Agreement, and the application of such provision to Persons or circumstances other than those as to which it is specifically held invalid or unenforceable, will not be affected thereby, and each and every remaining provision of this Agreement will be valid and binding to the fullest extent permitted by Applicable Law; **provided, however**, the Parties agree to negotiate in good faith and shall reform this Agreement to the fullest extent permitted by Applicable Law to as closely as possible resemble the original intent and allocation of risks and benefits.

25.18 Joint Effort. Preparation of this Agreement has been a joint effort of the Parties and the resulting document (or any portion thereof) is not to be construed more severely against one of the Parties than against the other.

25.19 Counterparts. This Agreement may be executed in two (2) or more counterparts, each of which is deemed to be an original, but all of which together shall constitute one and the same instrument.

25.20 Approvals Not To Relieve Contractor. No approval, consent or failure to disapprove, inspect or failure to inspect, or comment on, any matter by or the submission of any drawing or document to, or acquiescence on the part of, Owner, including any Certificate or Turnover Acknowledgment, will relieve Contractor of any liability for any of its obligations under this Agreement or otherwise.

25.21 Consultants. At its option, Owner or the Financing Parties may retain the services of others, including engineers and financial consultants, to assist Owner and Financing Parties in monitoring the conduct of the Work by Contractor. All rights of access and protection, including Contractor's obligation to indemnify, defend and hold harmless Owner and Financing Parties, will be afforded equally to any of their agents and consultants.

25.22 Equal Employment Opportunity. To the extent applicable, Contractor shall comply with all of the following provisions, which are incorporated herein by reference: (i) Equal Opportunity regulations set forth in 41 CFR § 60-1.4(a) and (c), prohibiting employment discrimination against any employee or applicant because of race, color, religion, sex, or national origin; (ii) Vietnam Era Veterans Readjustment Assistance Act regulations set forth in 41 CFR § 60-250.4 relating to the employment and advancement of disabled veterans and Vietnam era veterans; (iii) Rehabilitation Act regulations set forth in 41 CFR §60-741.4 relating to the employment and advancement of qualified disabled employees and applicants for employment; (iv) the clause known as "Utilization of Small Business Concerns and Small Business Concerns Owned and Controlled by Socially and Economically Disadvantaged Individuals" set forth in 15 USC § 637(d)(3); and (v) the subcontracting plan requirement set forth in 15 USC § 637(d). Without limiting the foregoing, Contractor and its subcontractors shall abide by the requirements of 41 CFR 60-300.5(a) and 60-741.5(a). These regulations prohibit discrimination against qualified individuals on the basis of protected veteran status or disability, and require affirmative action by covered prime contractors and subcontractors to employ and advance in employment qualified protected veterans and individuals with disabilities.

25.23 Minority, Women, Disadvantaged and Local Business Enterprises. Owner has a "Supplier Diversity Policy" to provide the maximum opportunity for MBEs, WBEs, DBEs, and LCs to participate as subcontractors for goods and services. As such, every attempt should be made by Contractor to include MBEs, WBEs, DBEs, and LCs, on subcontract bid lists for the Work. To the extent practicable, this requirement shall be passed down to Subcontractors. Contractor shall provide a supplier diversity program for the Work. Elements of such a program shall at a minimum include: (i) a goal setting process for identifying MBE/WBE/DBE/LC opportunities for involvement in the Work; (ii) an outreach process to identify and attract possible MBE/WBE/DBE/LC business interest in the Work, including working with local



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Trimble County CCRT
Engineering, Procurement, and Construction Agreement

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organizations such as Kentuckiana Minority Business Council; (iii) a pre-qualification process to assess the suitability of interested MBE/WBE/DBE/LCs; (iv) a bidding process inclusive of suitable MBE/WBE/DBE/LCs on subcontract bid lists; and (v) a monitoring process to provide statistical reporting on opportunities and utilization. Contractor shall report to Owner with respect to its compliance with this **Section 25.23** in accordance with **Exhibit F-9**.

25.24 Local Involvement; Reporting.

25.24.1 Local Workers. Contractor shall make a diligent good faith effort to hire, to the maximum practical extent while otherwise meeting the requirements of this Agreement, qualified Local Hires for and in connection with the performance of the Work in the order of priority in which geographic areas are listed in the definition of Local Hires.

25.24.2 Local Content. Contractor shall make a diligent good faith effort to include, to the maximum practical extent while otherwise meeting the requirements of this Agreement, qualified contractors on subcontract bid lists for portions of the Work that are to be subcontracted by Contractor or Subcontractors in the order of priority in which geographic areas are listed in the definition of LC.

25.24.3 Reporting. Each Month commencing on the Effective Date, Contractor shall provide a written report substantially in the form set forth in **Exhibit F-9**, detailing statistical data relating to its workforce and those of Subcontractors, including information relating to Local Hires, MBEs, WBEs, DBEs, LCs, Local Spend, WBE Spend, DBE Spend, and MBE Spend. Contractor will not be obligated to provide confidential individual employee information under this **Section 25.24.3**.

25.25 Special Provisions Regarding Transport Subproject Notwithstanding anything to the contrary in this Agreement:

- (i) Unless and until Owner gives Contractor a full notice to proceed on the Transport Subproject ("FNTTP"), the only Work Contractor shall perform related to the Transport Subproject shall be the Transport Preliminary Milestones and that shall only be performed in or after the applicable Transport Preliminary Milestone Month.
- (ii) If Owner gives the FNTTP, but it is given after the Effective Date, such delay shall constitute an Excusable Event, provided, that (a) for the first two hundred and seventy four (274) Days of such delay, the only Modifications to which Contractor shall be entitled with respect to such delay shall be (A) an extension of the Major Contract Milestones related to the Transport Subproject by the number of Days of such delay and (B) an increase in the Contract Price in the amount of [REDACTED] for each Day of such Delay (b) if the delay extends beyond two hundred and seventy four (274) Days, the only Modifications to which Contractor shall be entitled with respect to such delay shall be (X) as set forth in clause (A), above, for the first two hundred and seventy four (274) Days plus (Y) for the delay in excess of two hundred and seventy four

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Trimble County CCRT
Engineering, Procurement, and Construction Agreement

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(274) Days, such Adjustments as determined in accordance with Article 10 for such excess delay.

- (iii) If and when the FNTTP is given,
- (a) the Milestone Payment Schedule (**Exhibit C**) shall be adjusted by (A) renaming the “Transport Preliminary Milestones Amount” column to “Transport Milestones Amount,” (B) taking each milestone and corresponding amount set forth in **Exhibit C1** and inserting them into the columns for “Milestones” and “Transport Milestones Amount” in the month designated for that milestone in **Exhibit C1** (e.g., if FNTTP is given in September 2016, a milestone on **Exhibit C1** with a “Post FNTTP Month” of “3” will be added into the Milestone Payment Schedule in the “Month Work Performed” for December 2016), and (C) the appropriate changes will be made in the columns headed: “Invoice Month,” “Total Milestone Amount,” “Monthly Summary,” “Maximum Cumulative Application for Payment Amount,” and
 - (b) the Termination Payment Schedule (**Exhibit B**) shall be adjusted by (A) eliminating the columns headed “Transport Preliminary Subproject” and “Transport Subproject Cumulative Termination Amount” (B) taking each Termination Amount and Cumulative Termination Amount set forth in **Exhibit B1** and adding them into the corresponding amounts in **Exhibit B** for the month designated for that milestone in **Exhibit B1** (e.g., if FNTTP is given in September 2016, the Termination Amount on **Exhibit B1** with a “Post FNTTP Month” of “3” will be added into the Termination Amount for December 2016).

Contractor shall not be entitled to the milestones amounts nor to the termination amounts set forth in **Exhibit C1** or **B1** unless Owner gives the FNTTP.

- (iv) The adjustment to the Contract Price set forth in clause (ii)(a)(B), above (a) shall be added to the Milestone Payment Schedule by ratably distributing it over a period equal to the number of Days of delay and ending on the Substantial Completion Date (as such date is extended on the Milestone Payment Schedule pursuant to clause (ii)(a)(A), above) and (b) shall be reduced by [REDACTED] for each Day that Substantial Completion is achieved prior to the Guaranteed Substantial Completion Date (as adjusted from time to time under this Agreement).
- (v) If at any time and from time to time Owner suspends the Transport Subproject prior to giving of the FNTTP, Owner shall not be responsible for paying any Contract Price for Work performed or expenses incurred after

such suspension except to the extent Owner gives notice to end the suspension.

- (vi) If at any time Owner terminates the Transport Subproject prior to giving the FNTTP (regardless of whether the Transport Project is then or was previously suspended), (a) Owner shall not be required to pay for any Work with respect to all or any part of a Transport Preliminary Milestone whose Transport Preliminary Milestone Month is after the Month in which the termination notice was given to Contractor (or if the Transport Subproject was in suspension prior to the termination, after the Month in which the applicable suspension notice was given), (b) notwithstanding anything in this Agreement to the contrary, in no event shall the amount required to be paid to Contractor hereunder as a consequence of termination of the Transport Subproject together with amounts that Owner has previously paid to Contractor under this Agreement with respect to the Transport Subproject exceed the amount shown on the termination payment schedule as set forth in **Exhibit B** for the Transport Subproject corresponding to the date on which the termination notice was given to Contractor (or, if the Transport Subproject is in suspension at the time of the termination, the date on which the applicable suspension notice was given), and (c) the amounts in **Exhibits B1 and C1** will never be added to the Milestone Payment Schedule (**Exhibit C**) nor to the Termination Payment Schedule (**Exhibit B**) and the Contract Price will be adjusted accordingly.



Trimble County CCRT
Engineering, Procurement, and Construction Agreement

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IN WITNESS WHEREOF the Parties have caused this Agreement to be executed by their
duly authorized representatives as of the Effective Date.

**LOUISVILLE GAS AND ELECTRIC
COMPANY**

KENTUCKY UTILITIES COMPANY

By: Anthony R. Ruchriegel 04/12/16
MANAGER, CONTRACTS
Title: MAJOR CAPITAL PROJECTS

By: Anthony R. Ruchriegel 04/12/16
MANAGER, CONTRACTS
Title: MAJOR CAPITAL PROJECTS

**INDIANA MUNICIPAL POWER
AGENCY**

**ILLINOIS MUNICIPAL ELECTRIC
AGENCY**

By: SEE ATTACHED

By: SEE ATTACHED

Title: _____

Title: _____

**AMEC FOSTER WHEELER
KAMTECH, INC.**

By: [Signature]

Title: President

[Handwritten initials]
[Handwritten mark]

Trimble County CCRT
Engineering, Procurement, and Construction Agreement

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IN WITNESS WHEREOF the Parties have caused this Agreement to be executed by their duly authorized representatives as of the Effective Date.

**LOUISVILLE GAS AND ELECTRIC
COMPANY**

KENTUCKY UTILITIES COMPANY

By: _____

By: _____

Title: _____

Title: _____

**INDIANA MUNICIPAL POWER
AGENCY**

**ILLINOIS MUNICIPAL ELECTRIC
AGENCY**

By: _____

By: *Kim M. Sun*

Title: _____

Title: PRESIDENT & CEO

**AMEC FOSTER WHEELER
KAMTECH, INC.**

By: *[Signature]*

Title: President

[Handwritten initials]

Trimble County CCRT
Engineering, Procurement, and Construction Agreement

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IN WITNESS WHEREOF the Parties have caused this Agreement to be executed by their duly authorized representatives as of the Effective Date.

**LOUISVILLE GAS AND ELECTRIC
COMPANY**

KENTUCKY UTILITIES COMPANY

By: _____

By: _____

Title: _____

Title: _____

**INDIANA MUNICIPAL POWER
AGENCY**

**ILLINOIS MUNICIPAL ELECTRIC
AGENCY**

By: Ben G. New

By: _____

Title: PRESIDENT/CEO

Title: _____

**AMEC FOSTER WHEELER
KAMTECH, INC.**

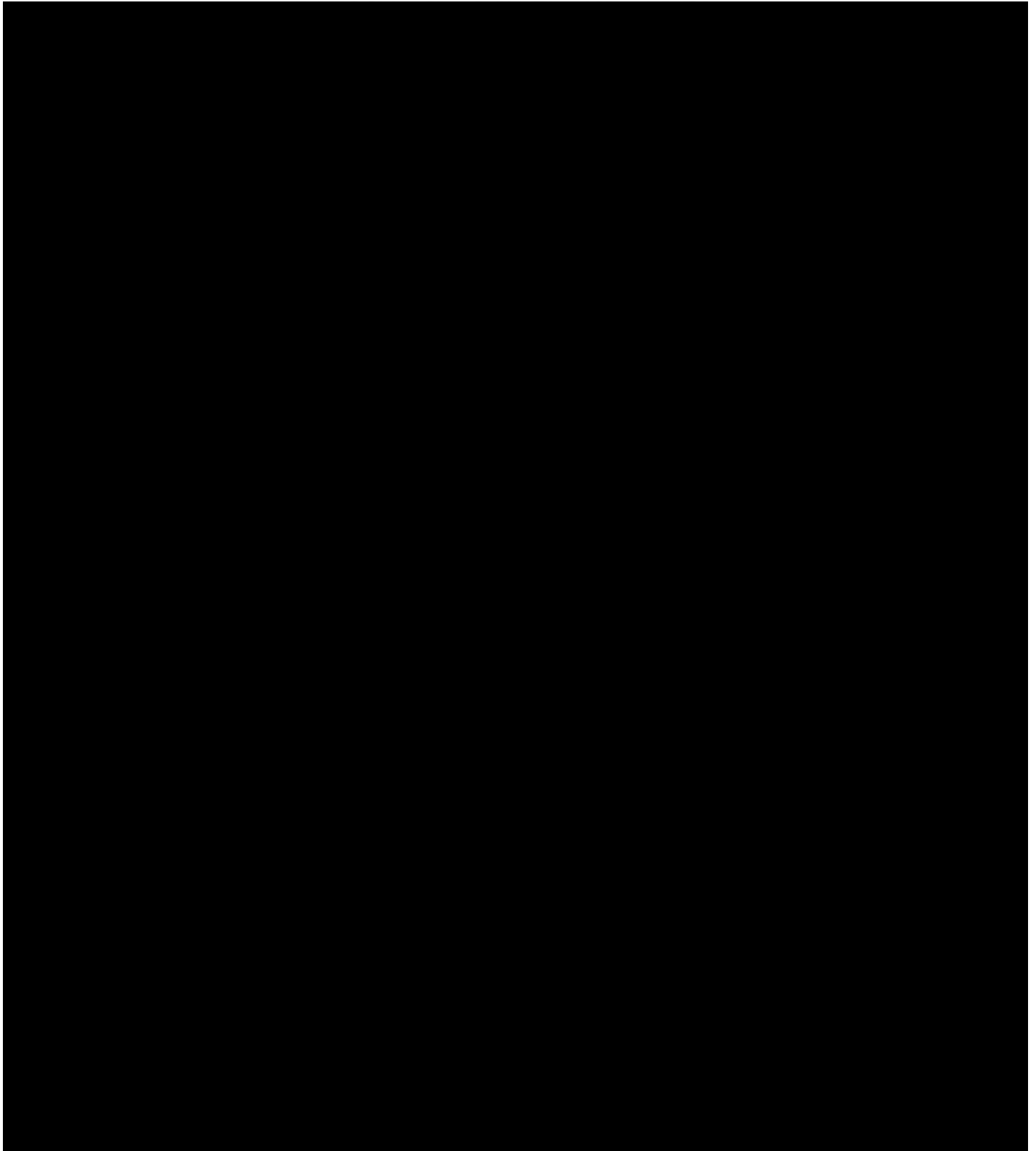
By: [Signature]

Title: President

[Handwritten initials]

EXHIBIT A

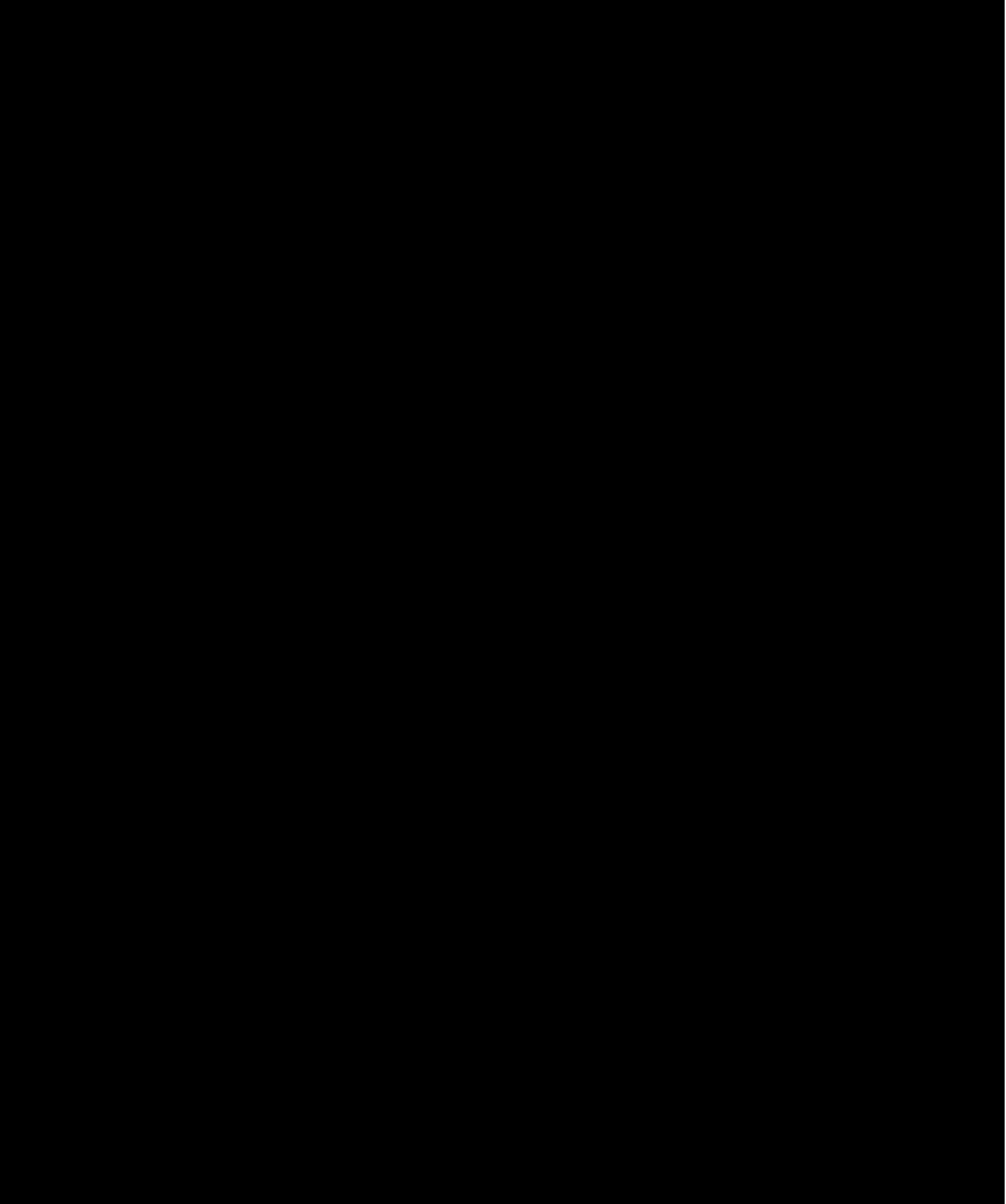
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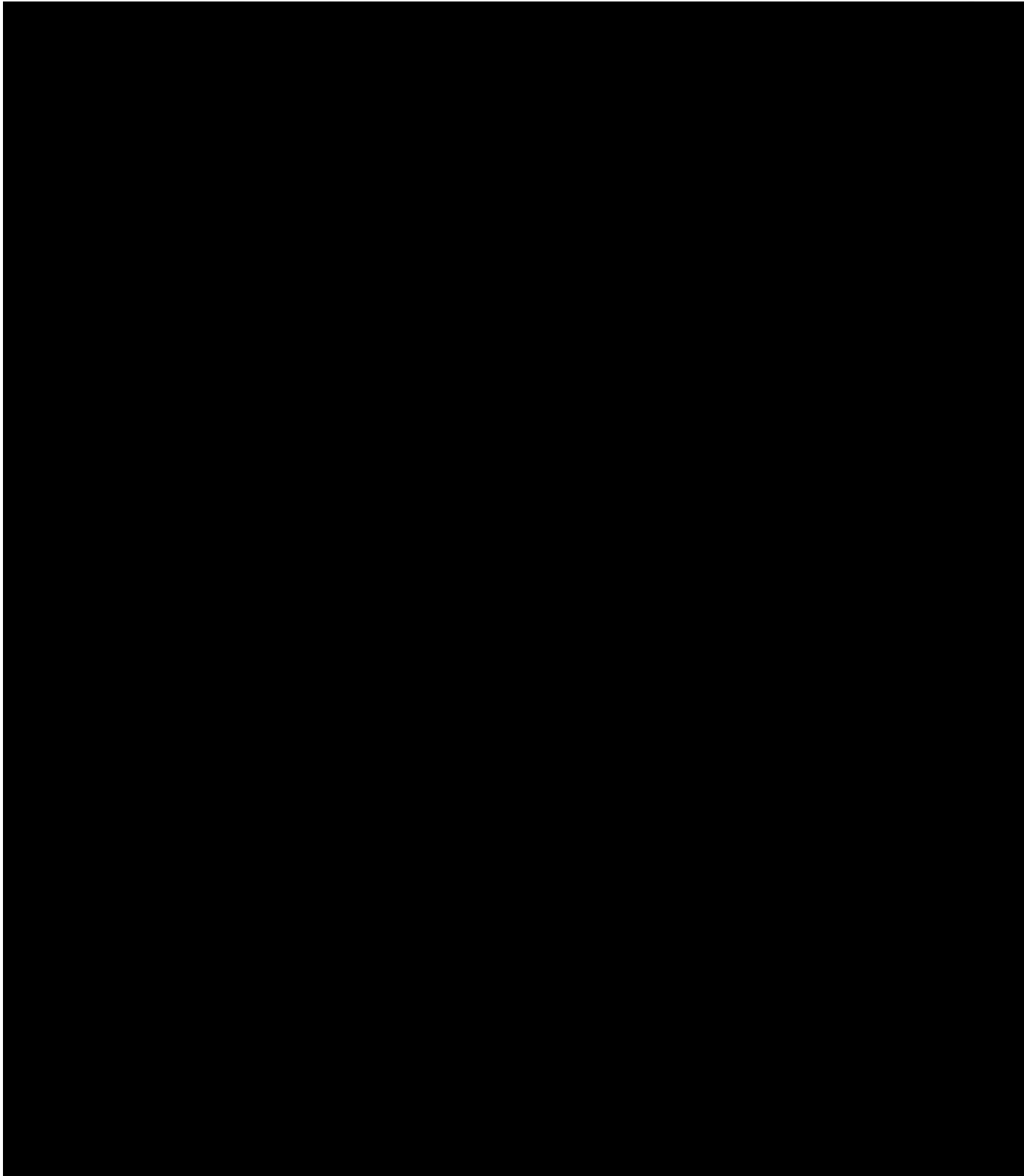
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Trimble County CCRT
Exhibit A – TECHNICAL SPECIFICATION
Engineering Procurement and Construction Agreement

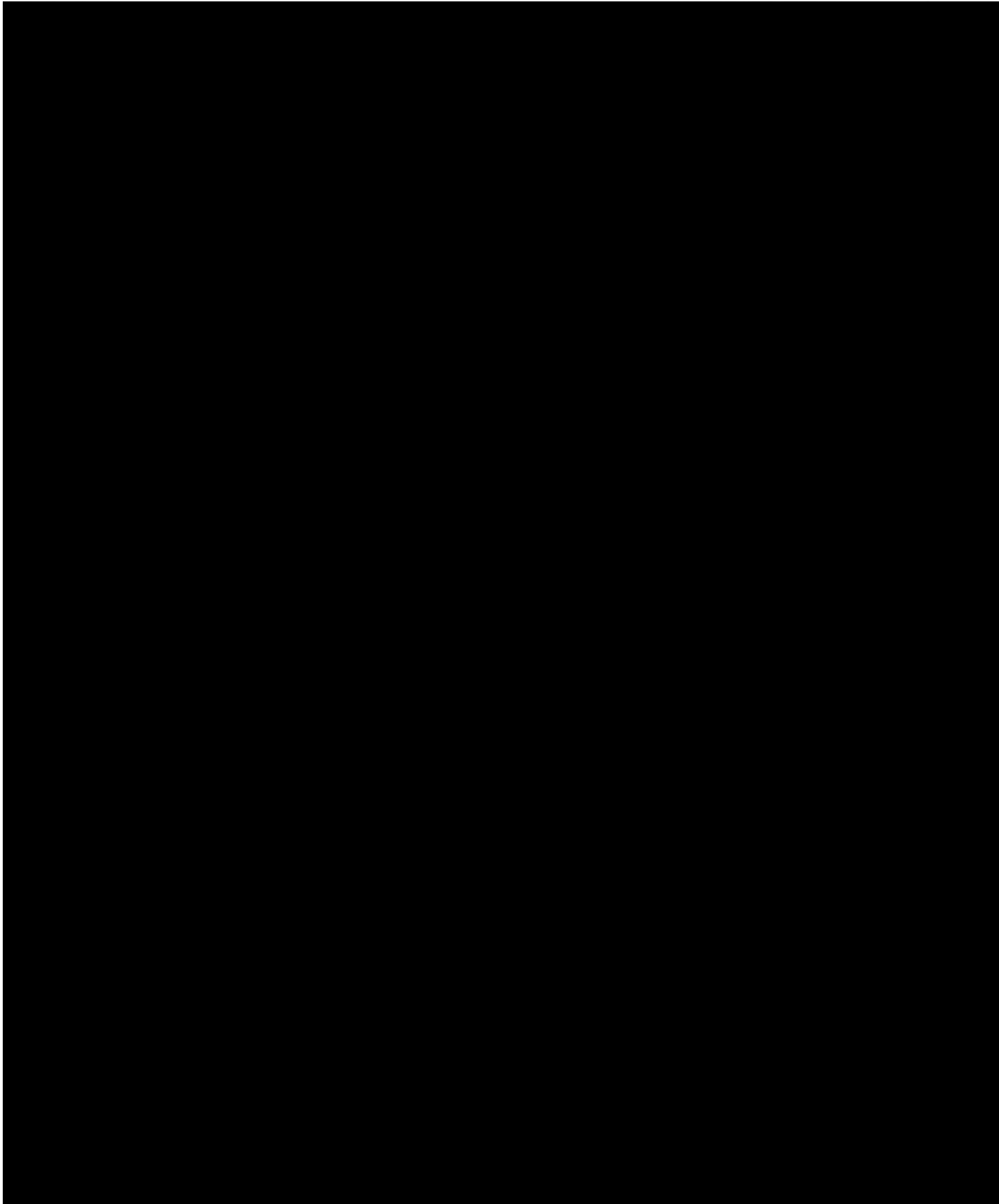
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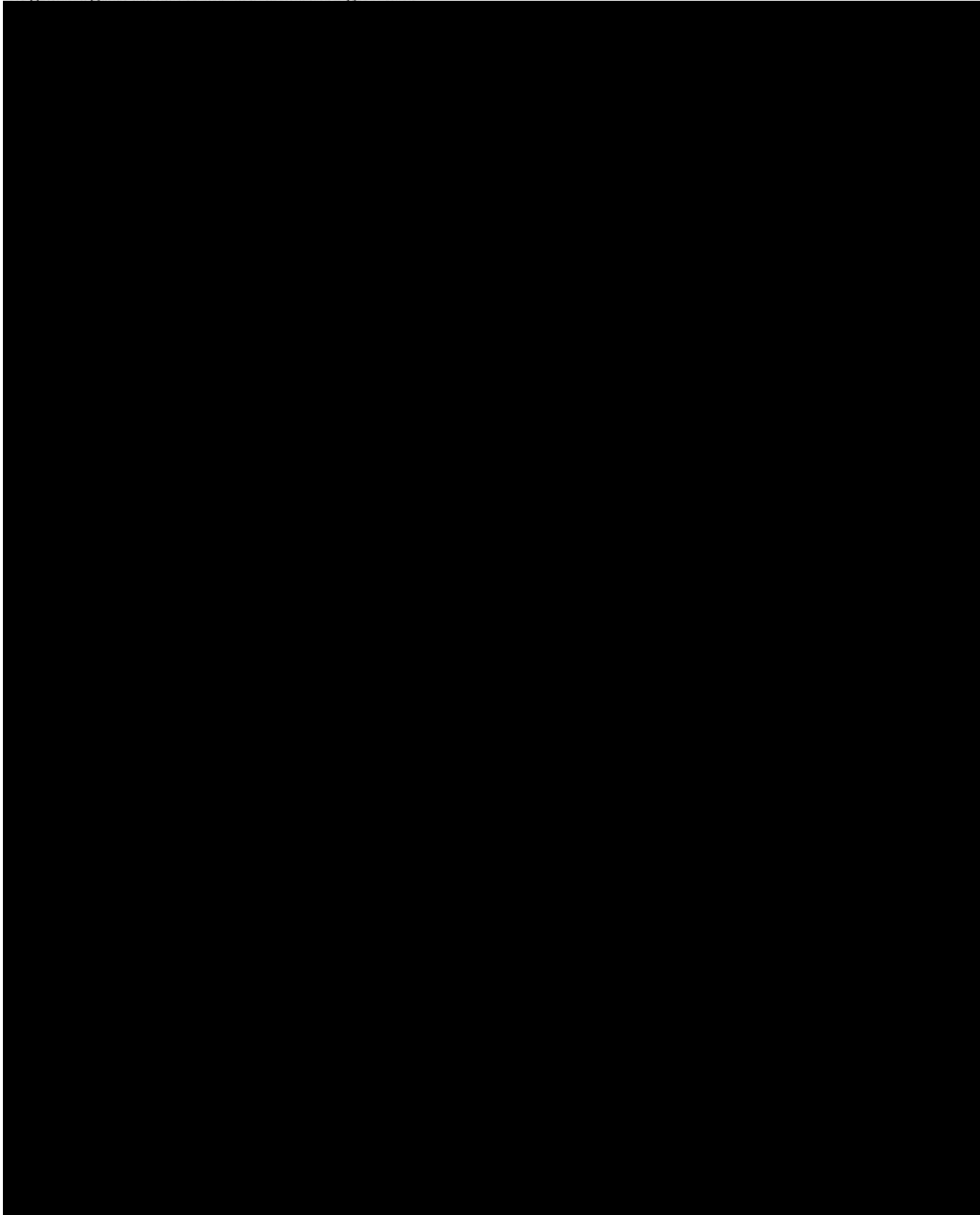
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A handwritten signature in blue ink is located in the bottom right corner of the page. The signature is stylized and appears to be initials or a name.



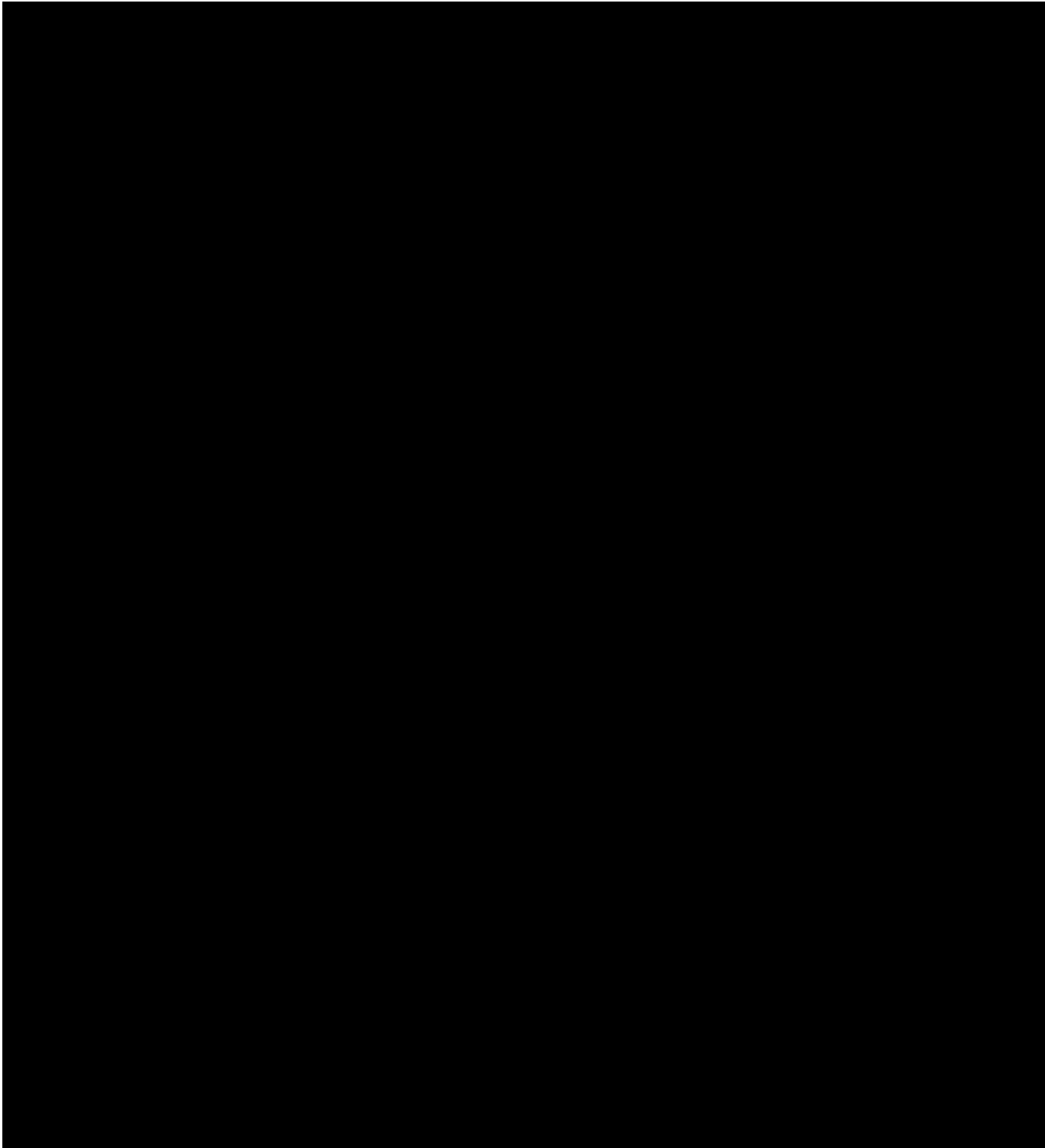
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Trimble County CCRT
Exhibit A – TECHNICAL SPECIFICATION
Engineering Procurement and Construction Agreement

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EXHIBIT A-1
TECHNICAL SPECIFICATIONS

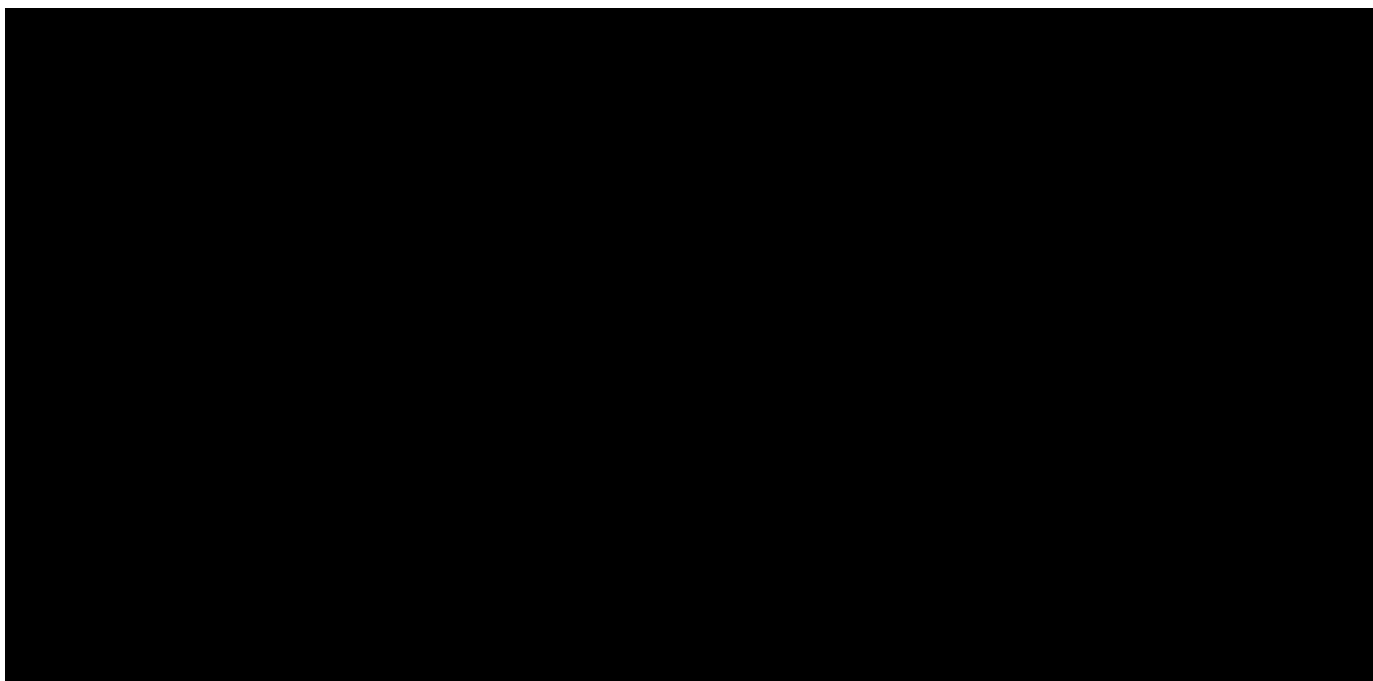
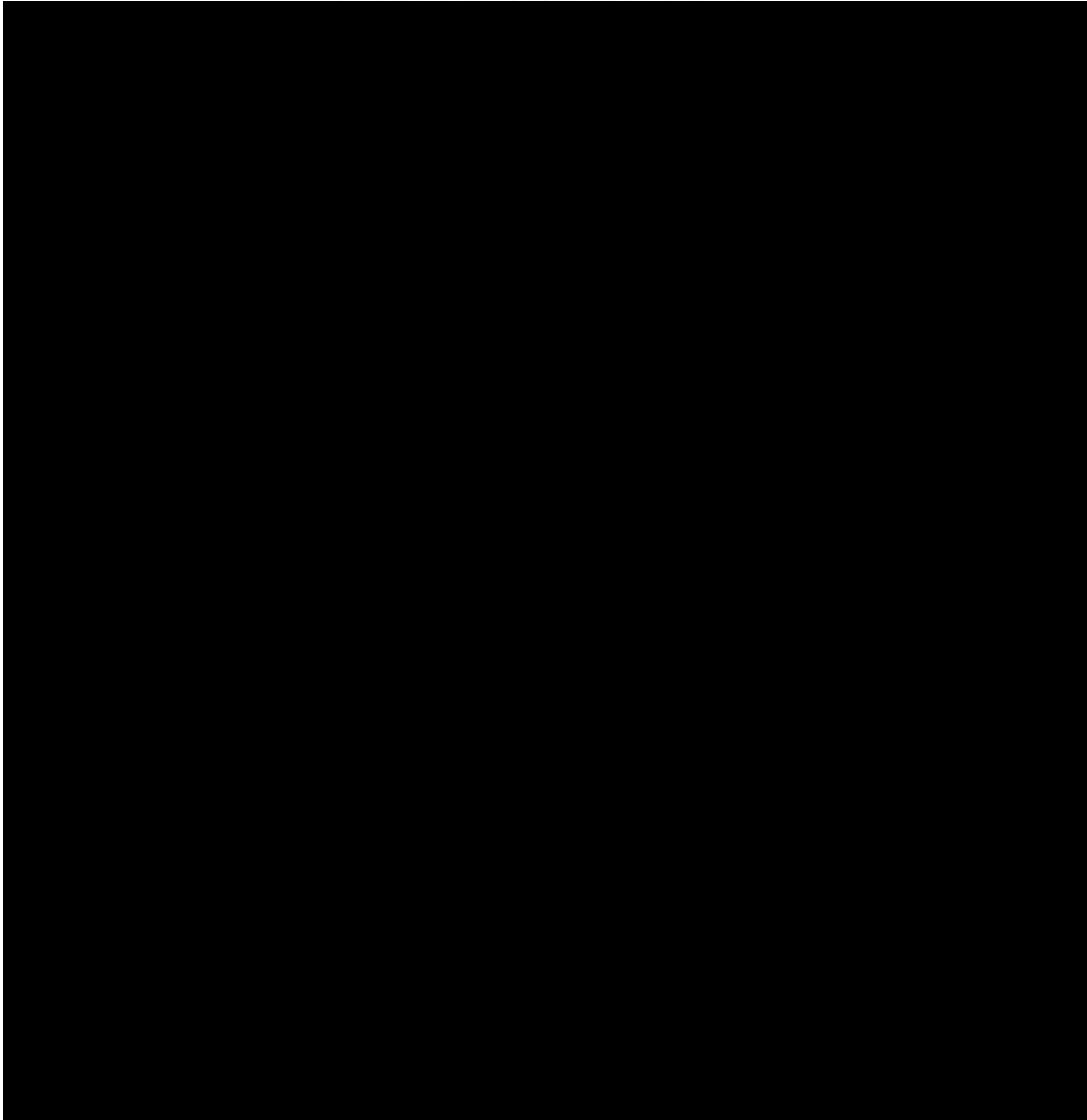


EXHIBIT A2

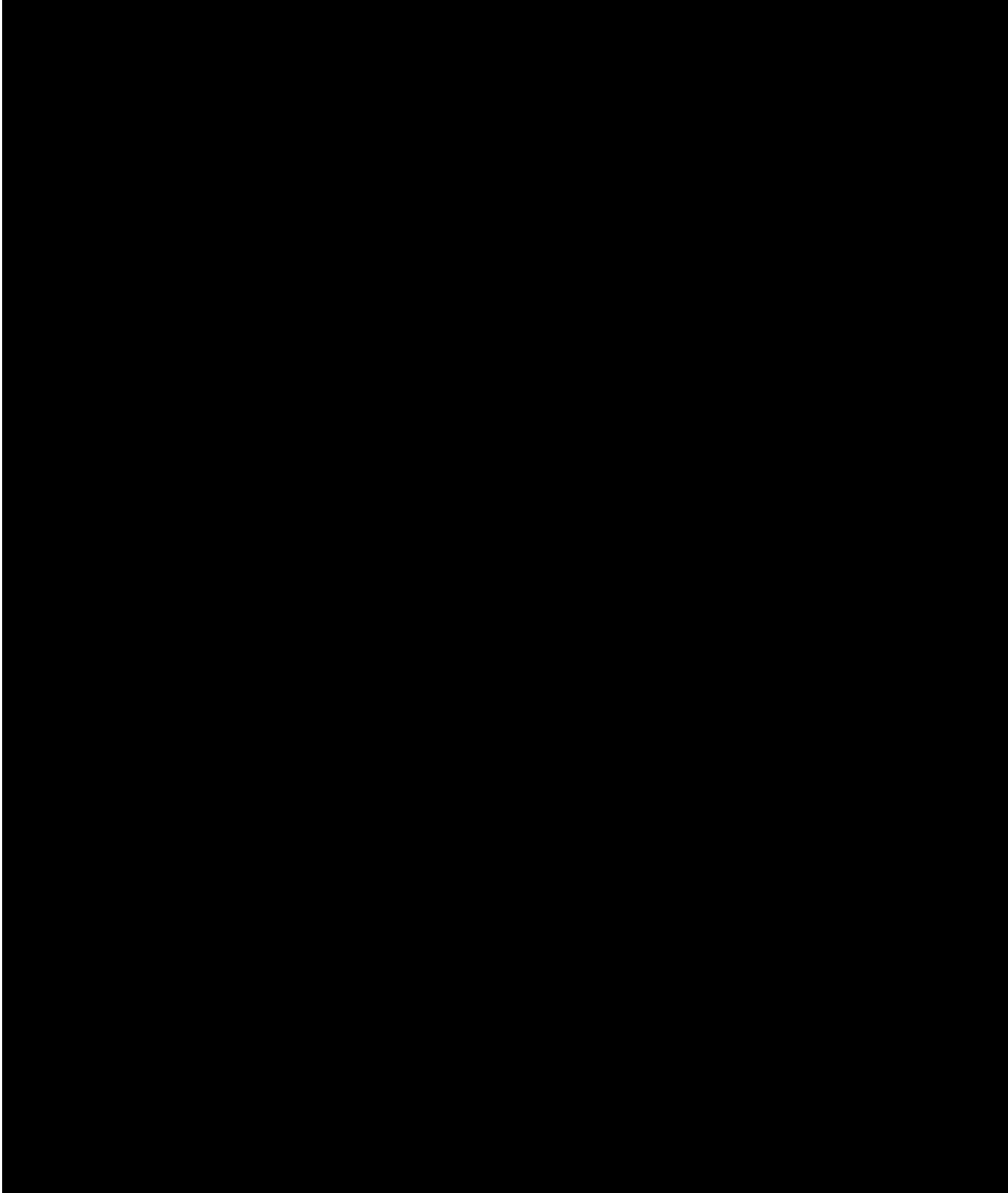
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Trimble County CCRT
Exhibit A2 – TECHNICAL SPECIFICATION
Engineering Procurement and Construction Agreement

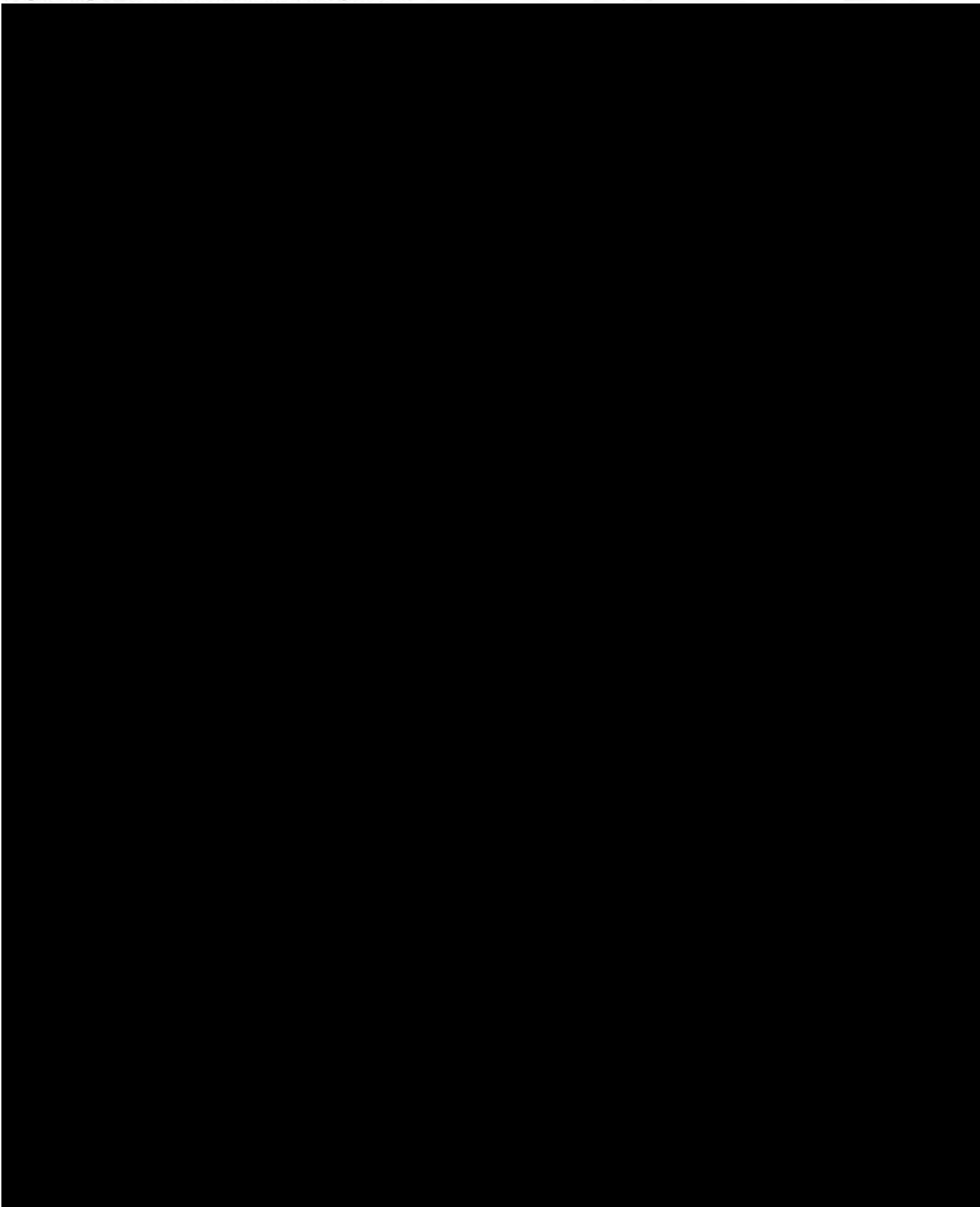
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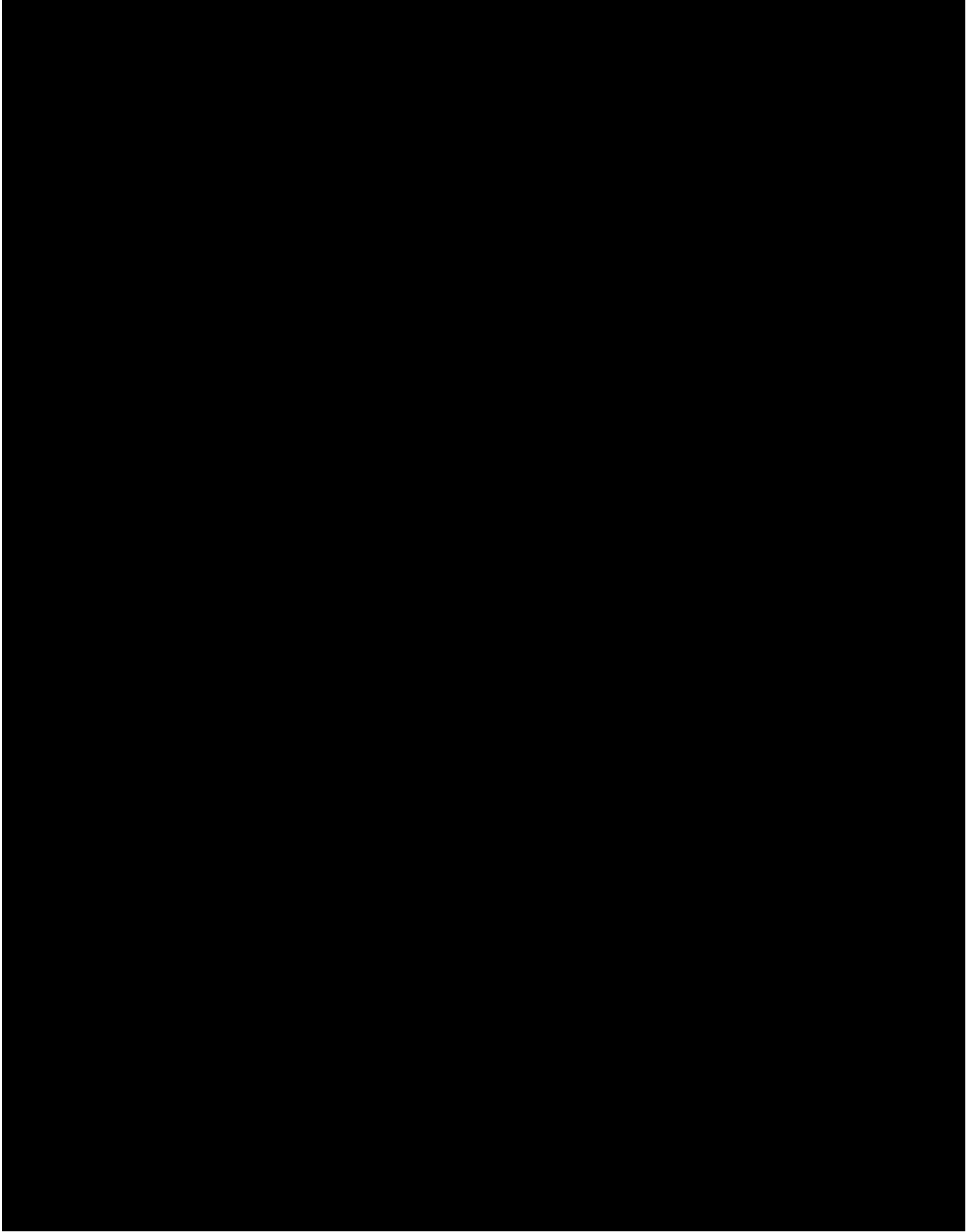
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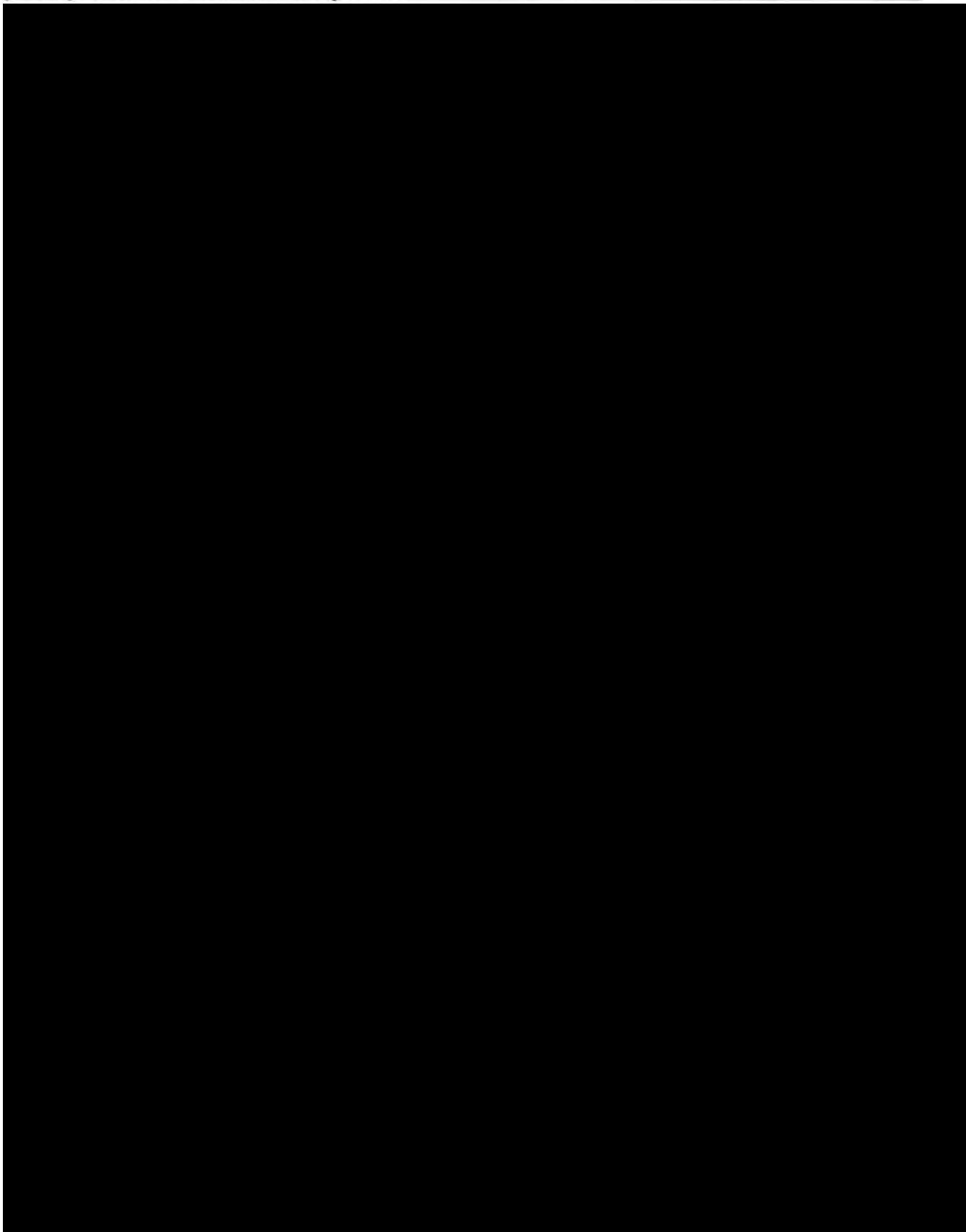
Trimble County CCRT
Exhibit A2 – TECHNICAL SPECIFICATION
Engineering Procurement and Construction Agreement

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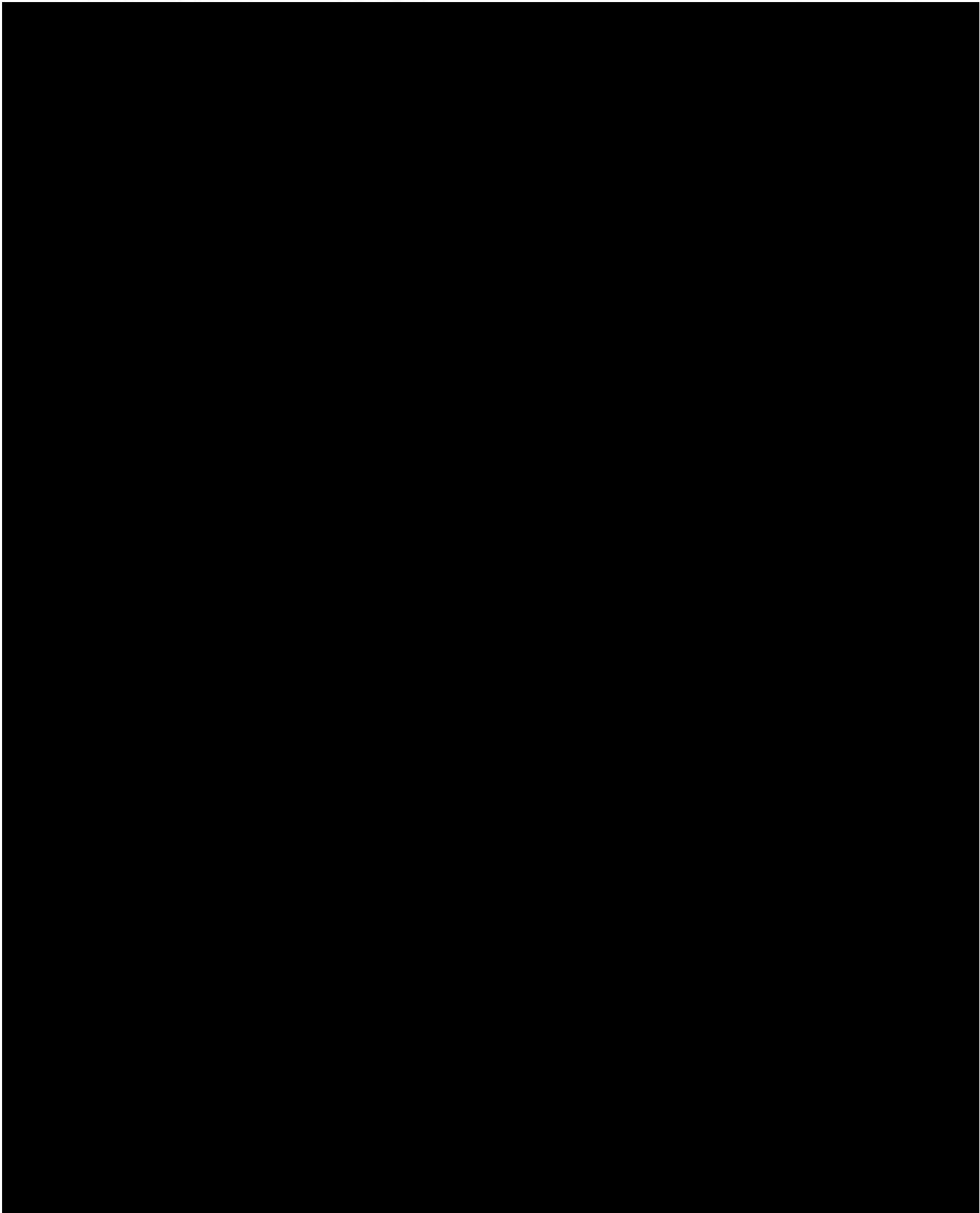


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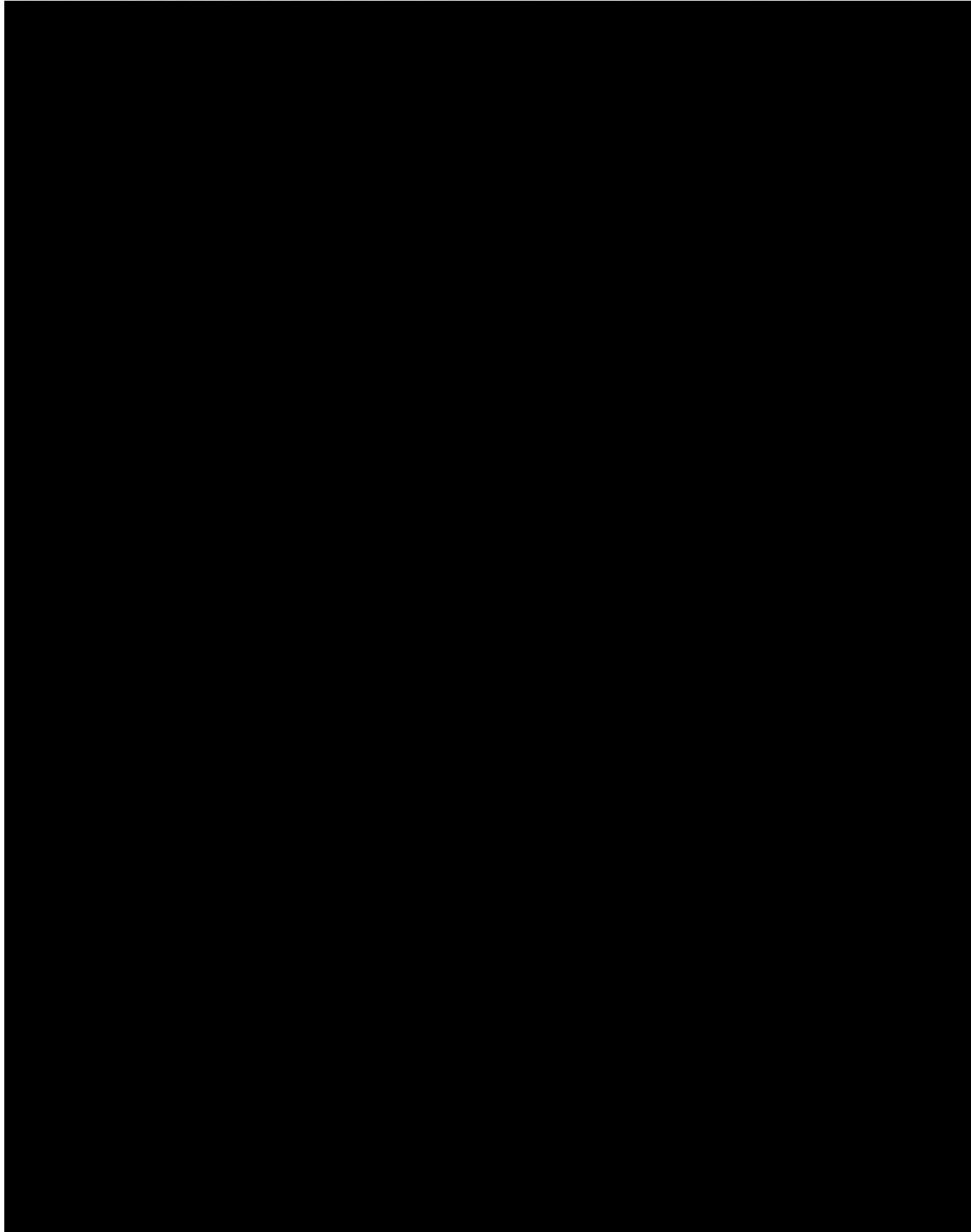


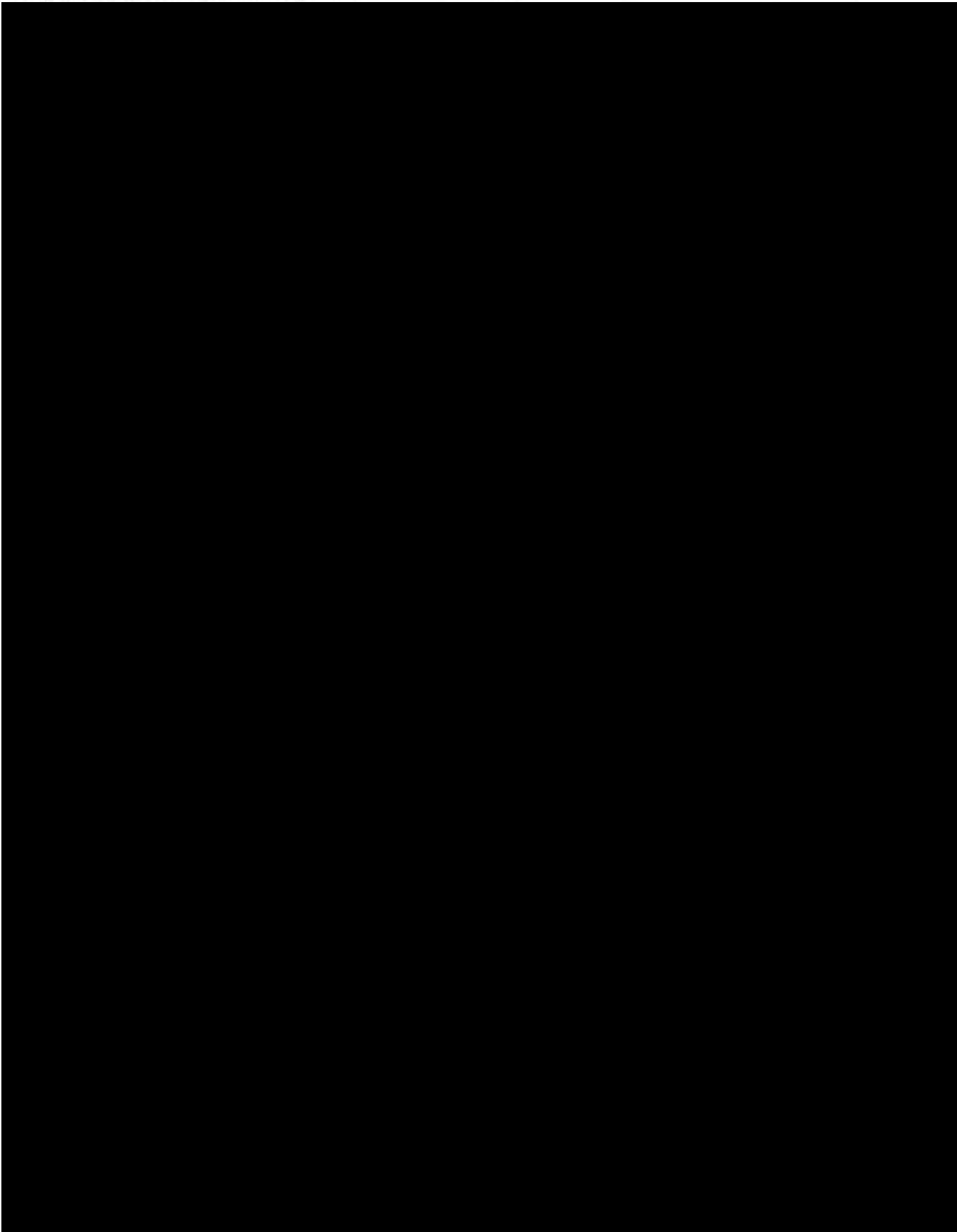


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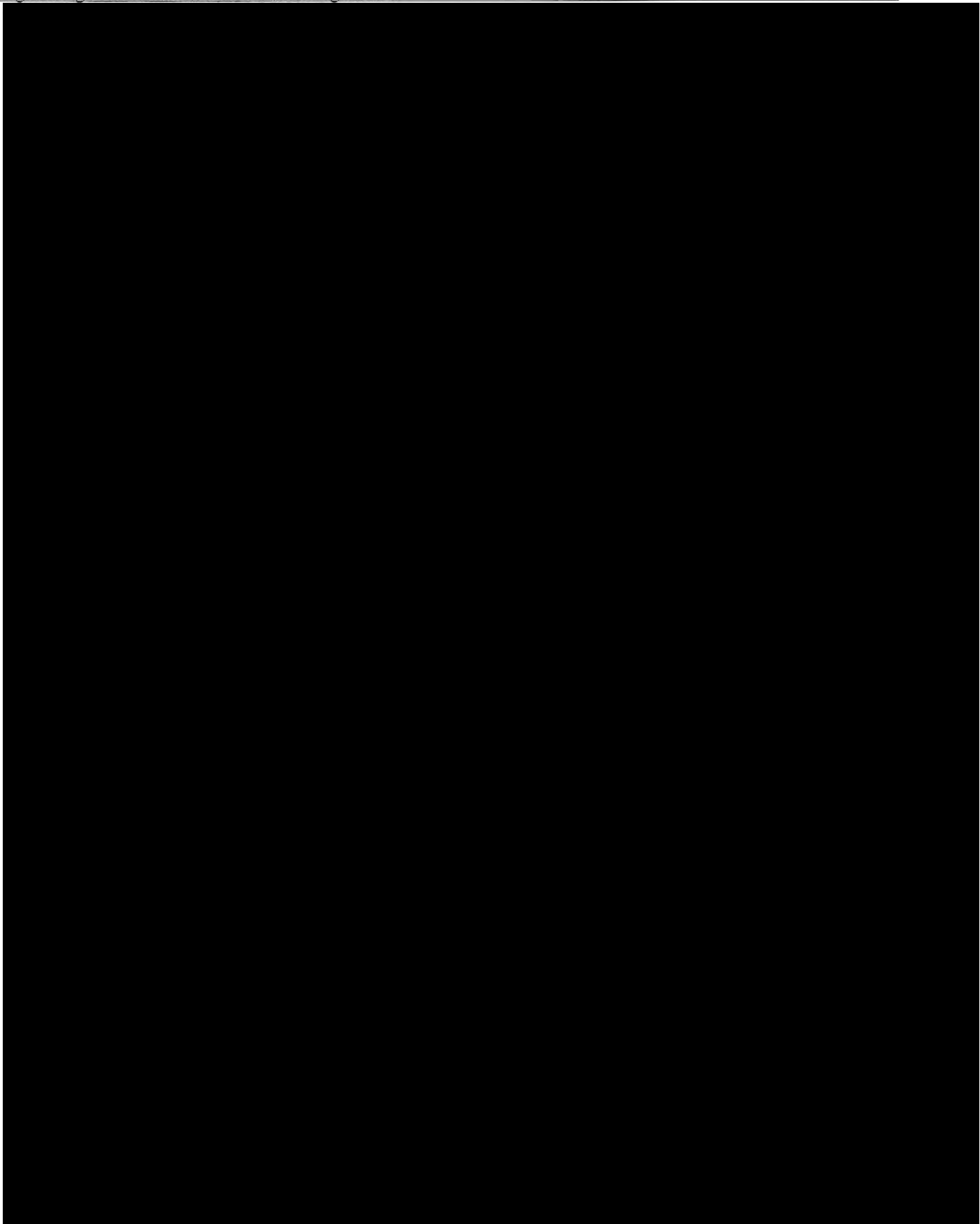


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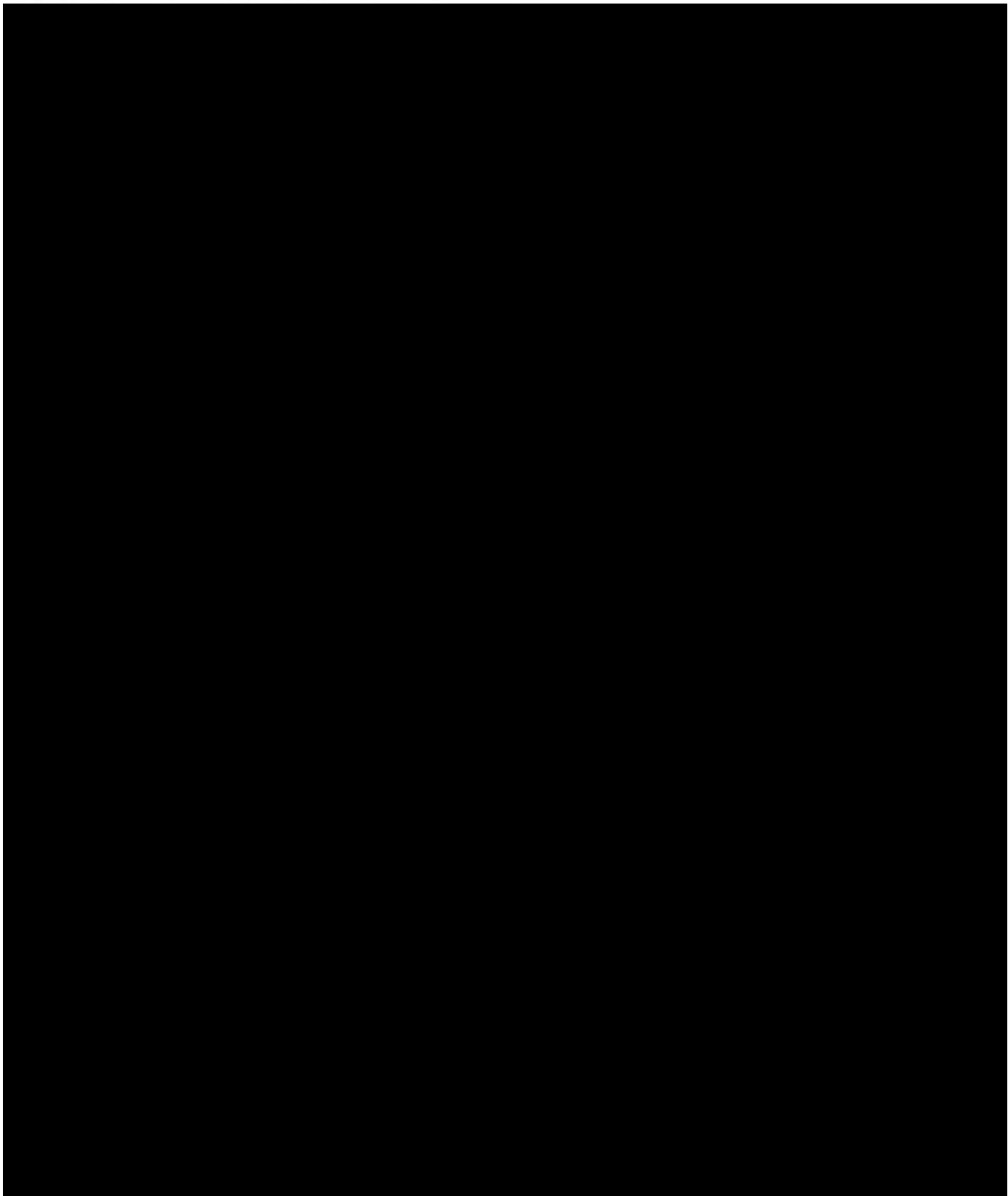




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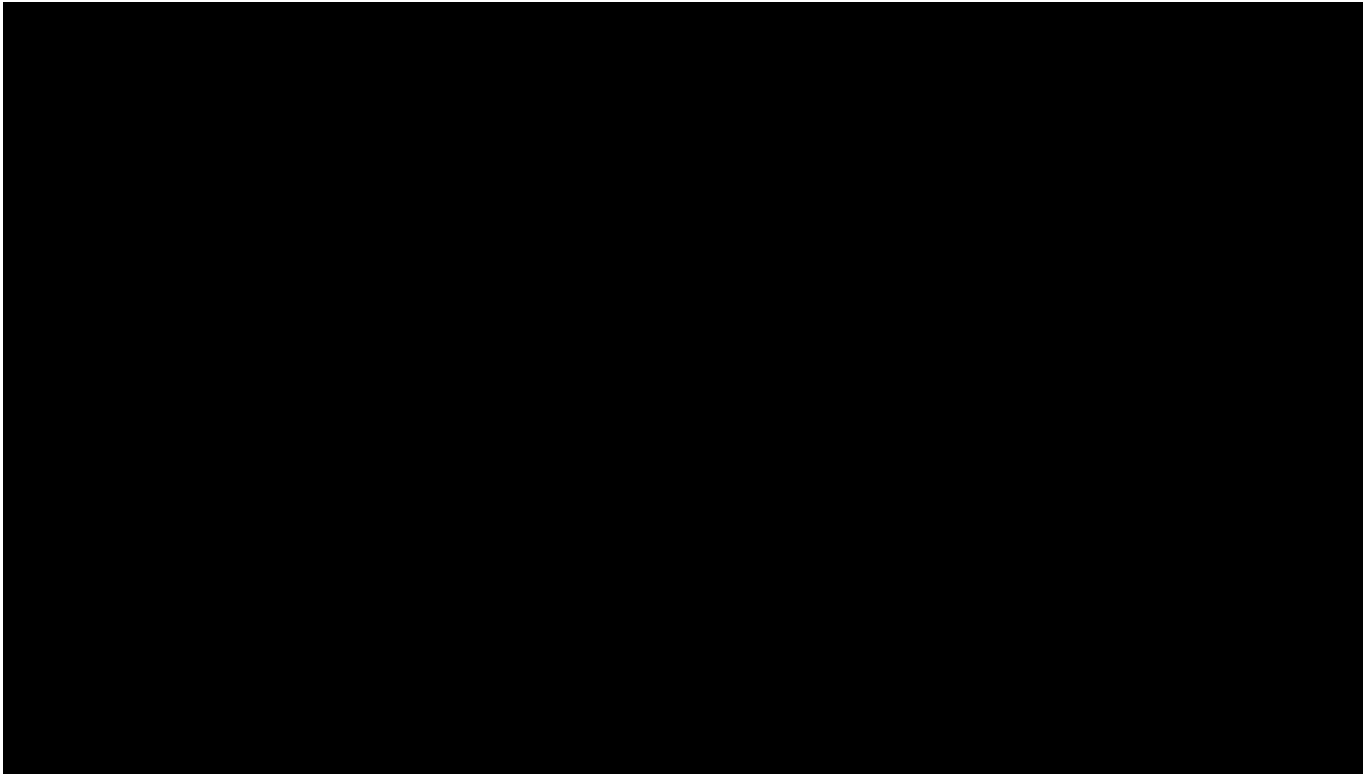


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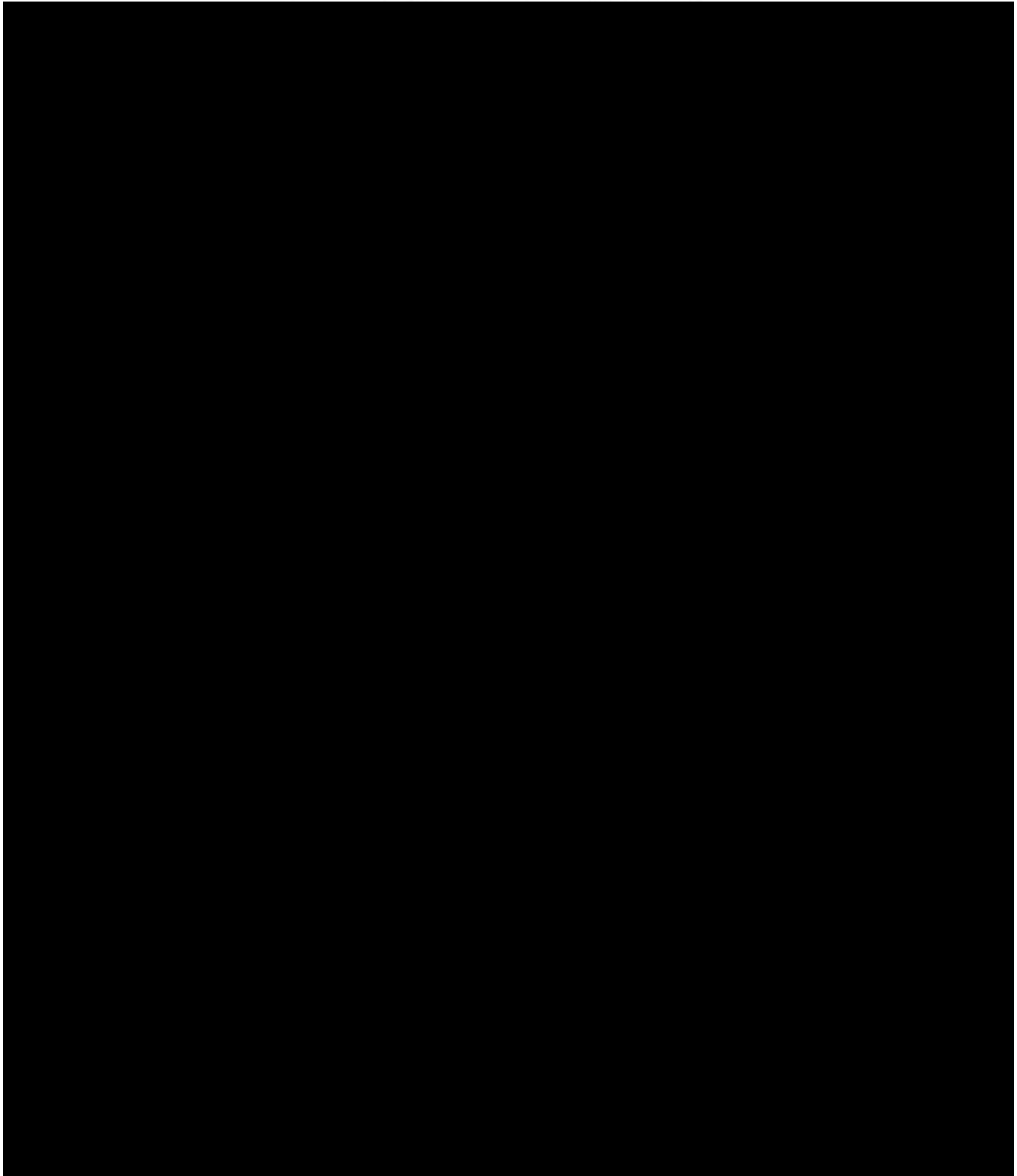
EXHIBIT A-2
TECHNICAL SPECIFICATIONS



Trimble County CCRT
Exhibit B - TERMINATION PAYMENT SCHEDULE
Engineering Procurement and Construction Agreement

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Exhibit B
TERMINATION PAYMENT SCHEDULE

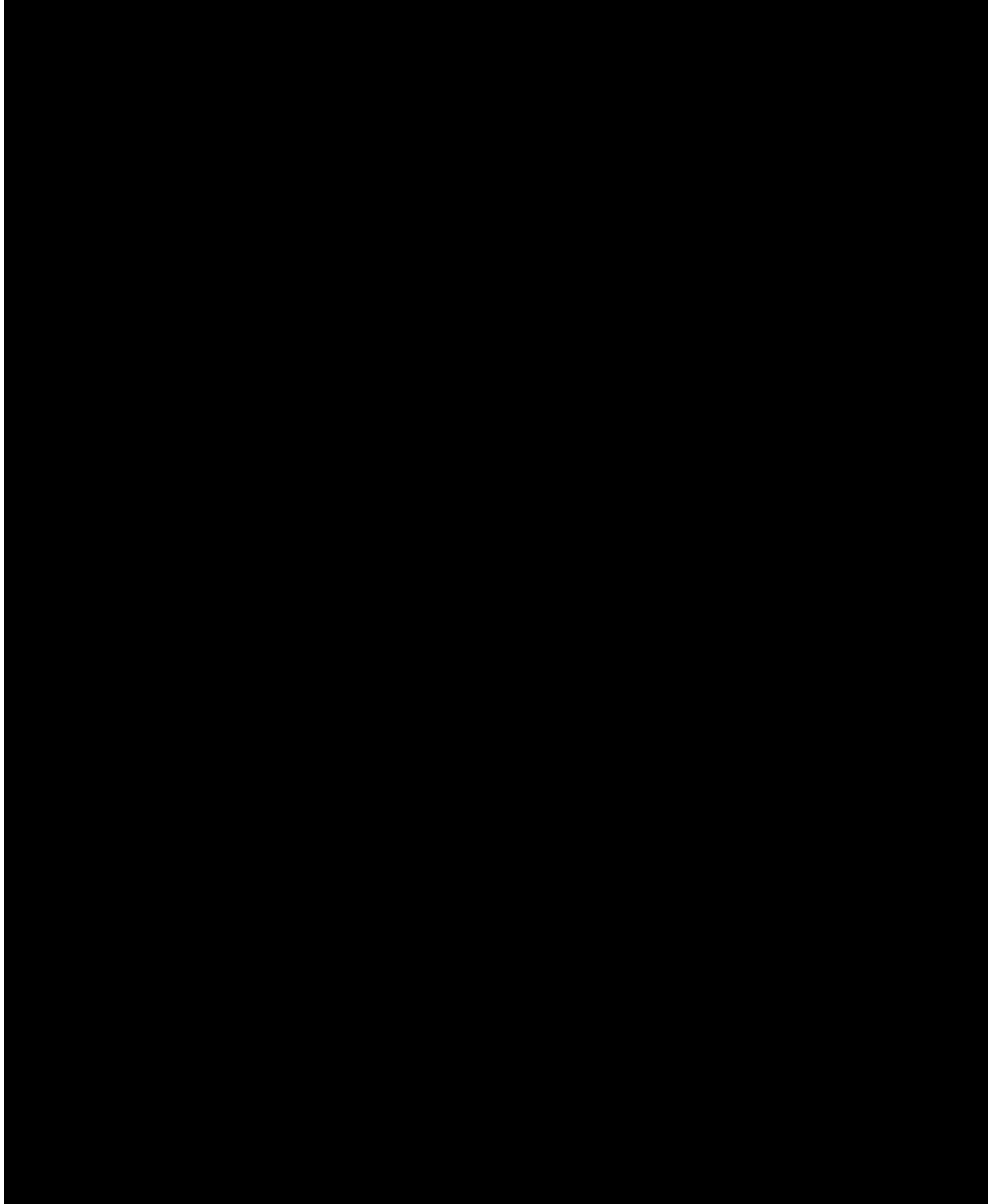


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Trimble County CCRT
Exhibit B1 - TERMINATION PAYMENT SCHEDULE: TRANSPORT POST FNTF
Engineering Procurement and Construction Agreement

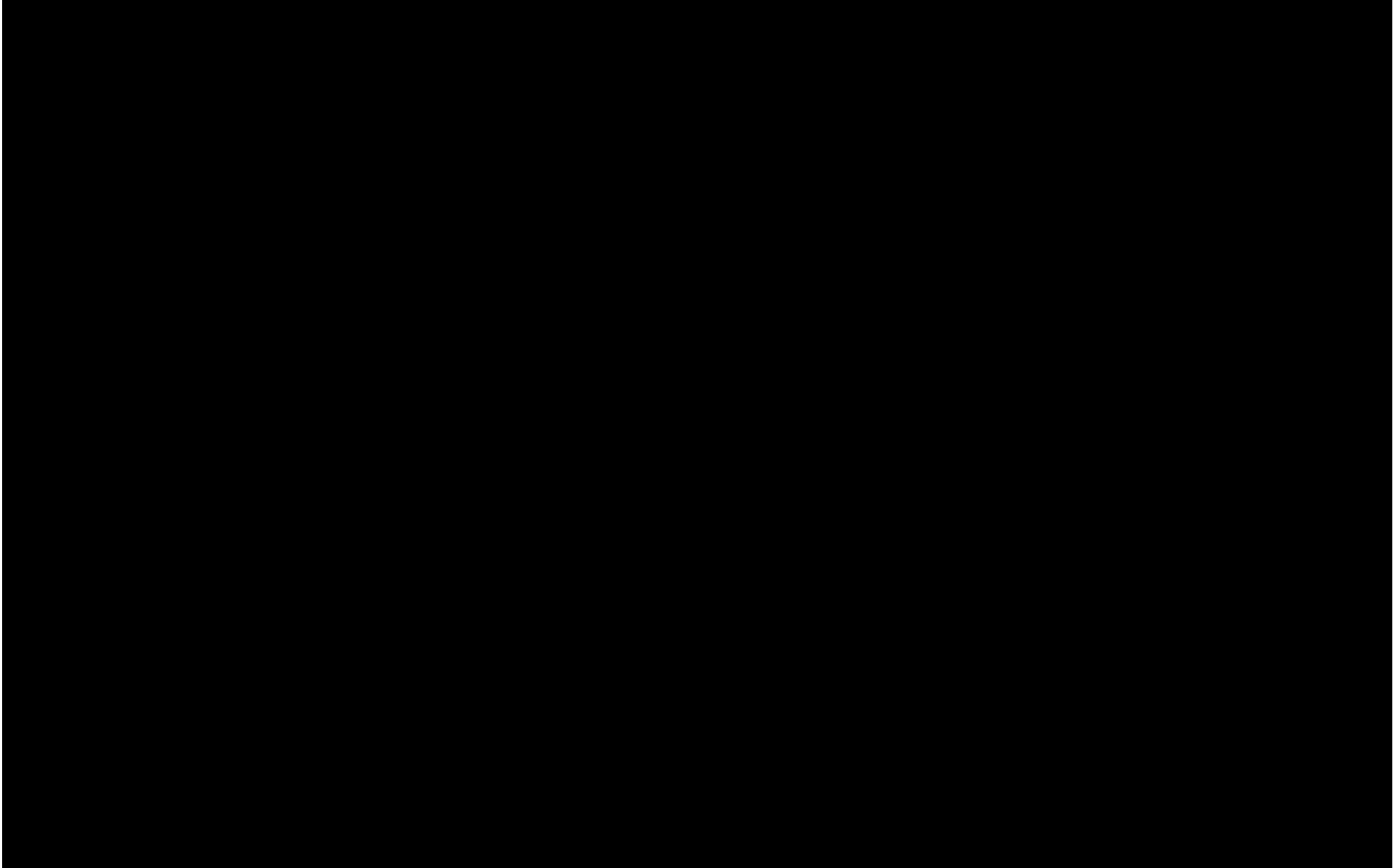
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Exhibit B1
TERMINATION PAYMENT SCHEDULE:
TRANSPORT POST FNTF



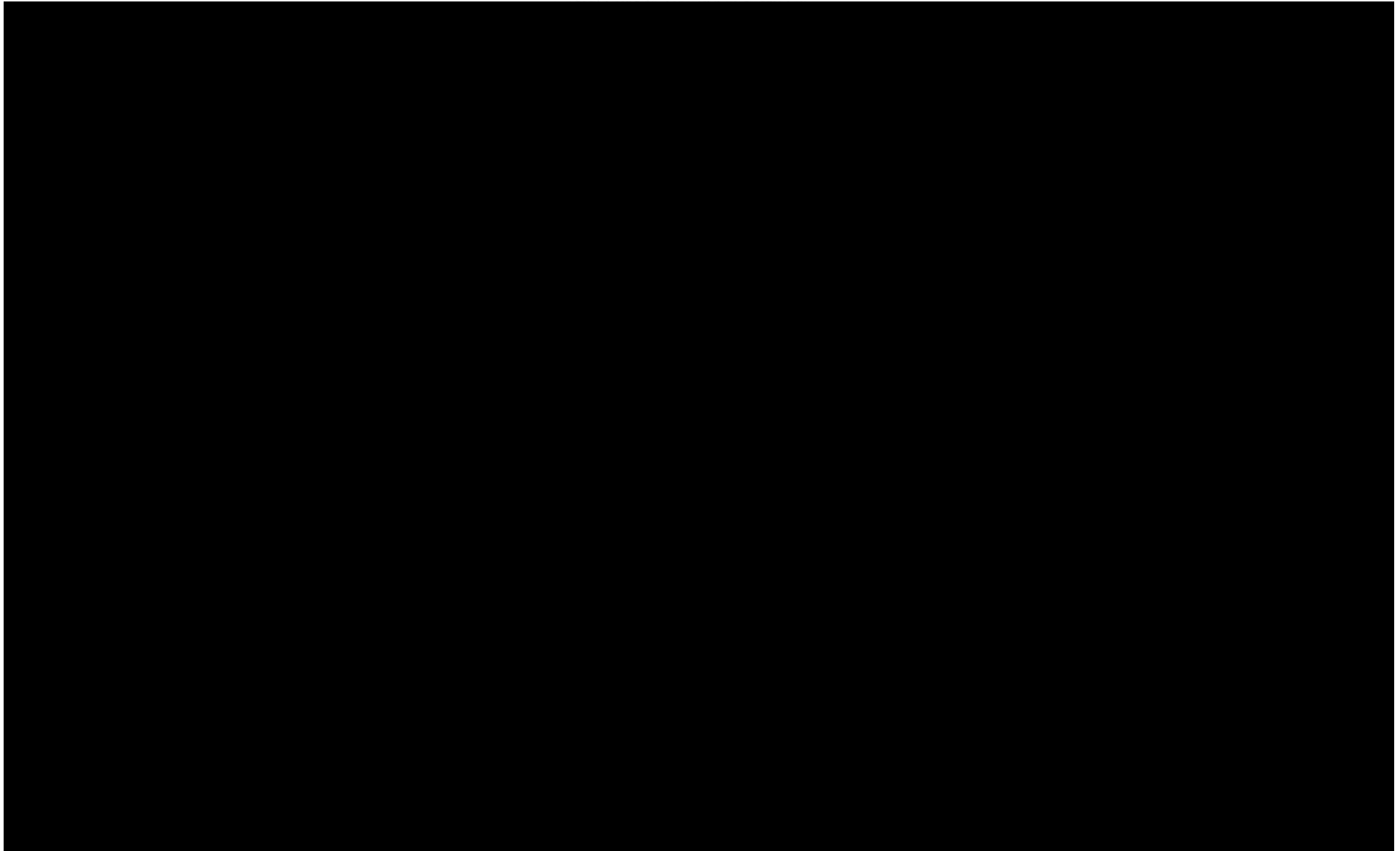
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Exhibit C
MILESTONE PAYMENT SCHEDULE



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Exhibit C
MILESTONE PAYMENT SCHEDULE



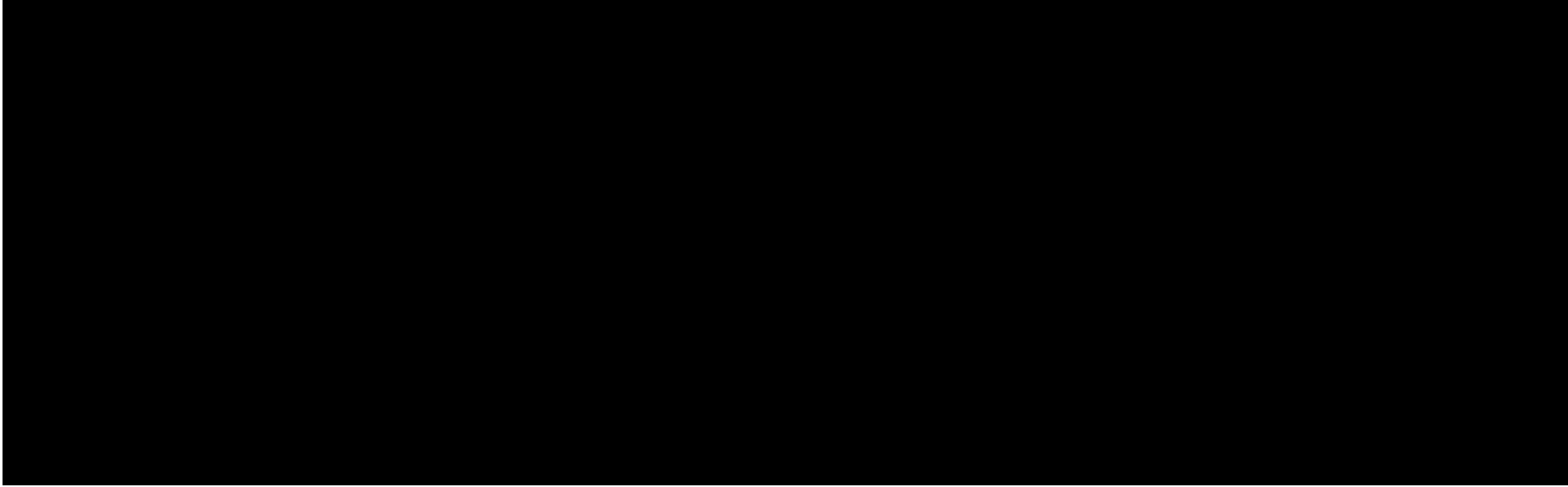
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Trimble County CCRT
Exhibit C - MILESTONE PAYMENT SCHEDULE
Engineering Procurement and Construction Agreement

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KU

Exhibit C
MILESTONE PAYMENT SCHEDULE

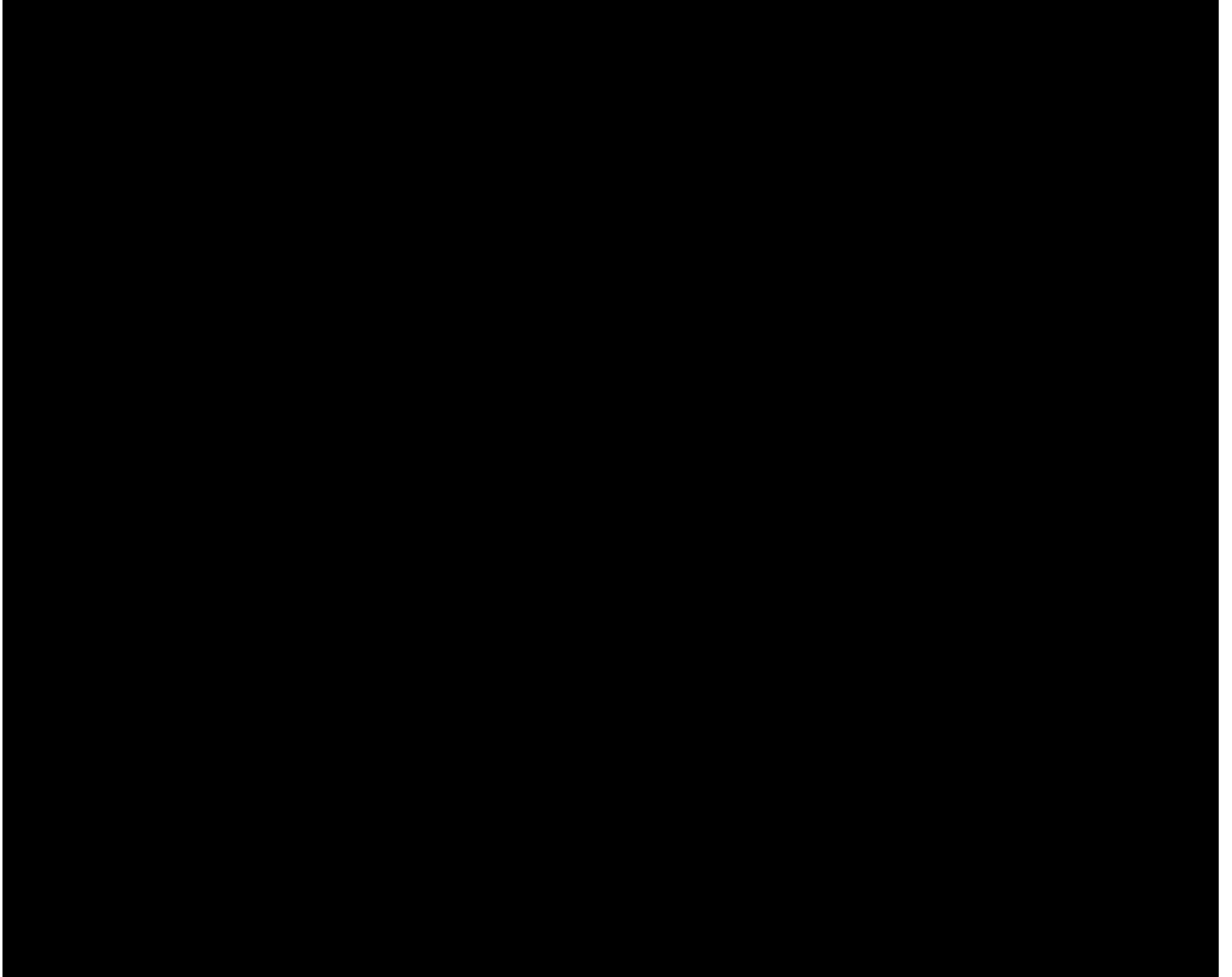


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Trimble County CCRT
Exhibit C1 - MILESTONE PAYMENT SCHEDULE; TRANSPORT POST FNTF
Engineering Procurement and Construction Agreement

Exhibit C1

MILESTONE PAYMENT SCHEDULE; TRANSPORT POST FNTF



A handwritten signature in blue ink is located in the bottom right corner of the page. The signature is stylized and appears to consist of the letters 'JLT' followed by a flourish.

EXHIBIT D
MAJOR CONTRACT MILESTONES

Subproject completion and operation dates:

1. Fly Ash Subproject: There is no Scheduled Tie-in Outage Period for this Subproject. The Tie-in will be during unit operation (or, if available, a planned or unplanned outage) without impacting unit operation.

Item	Date
Scheduled Mechanical Completion	May 16, 2018
Guaranteed Substantial Completion	June 27, 2018
Guaranteed Commercial Operation Date	July 31, 2018
Guaranteed Final Completion Date	August 30, 2018

2. Bottom Ash Subproject:
Unit 1 Local Bottom Ash Handling System:

Item	Date
Scheduled Mechanical Completion	November 7, 2017
Scheduled Tie-In Outage Period	September 27, 2017 – November 14, 2017
Guaranteed Substantial Completion	November 19, 2017
Guaranteed Commercial Operation Date	February 24, 2018
Guaranteed Final Completion Date	March 30, 2018

3. Gypsum Subproject: There is no Scheduled Tie-in Outage Period for this Subproject. The Tie-in will be during unit operation (or, if available, a planned or unplanned outage) without impacting unit operation.

Item	Date
Scheduled Mechanical Completion	May 16, 2018
Guaranteed Substantial Completion	June 27, 2018
Guaranteed Commercial Operation Date	July 31, 2018
Guaranteed Final Completion Date	August 30, 2018

4. Transport Subproject: There is no Scheduled Tie-in Outage Period for this Subproject. The Tie-in will be during unit operation (or, if available, a planned or unplanned outage) without impacting unit operation.

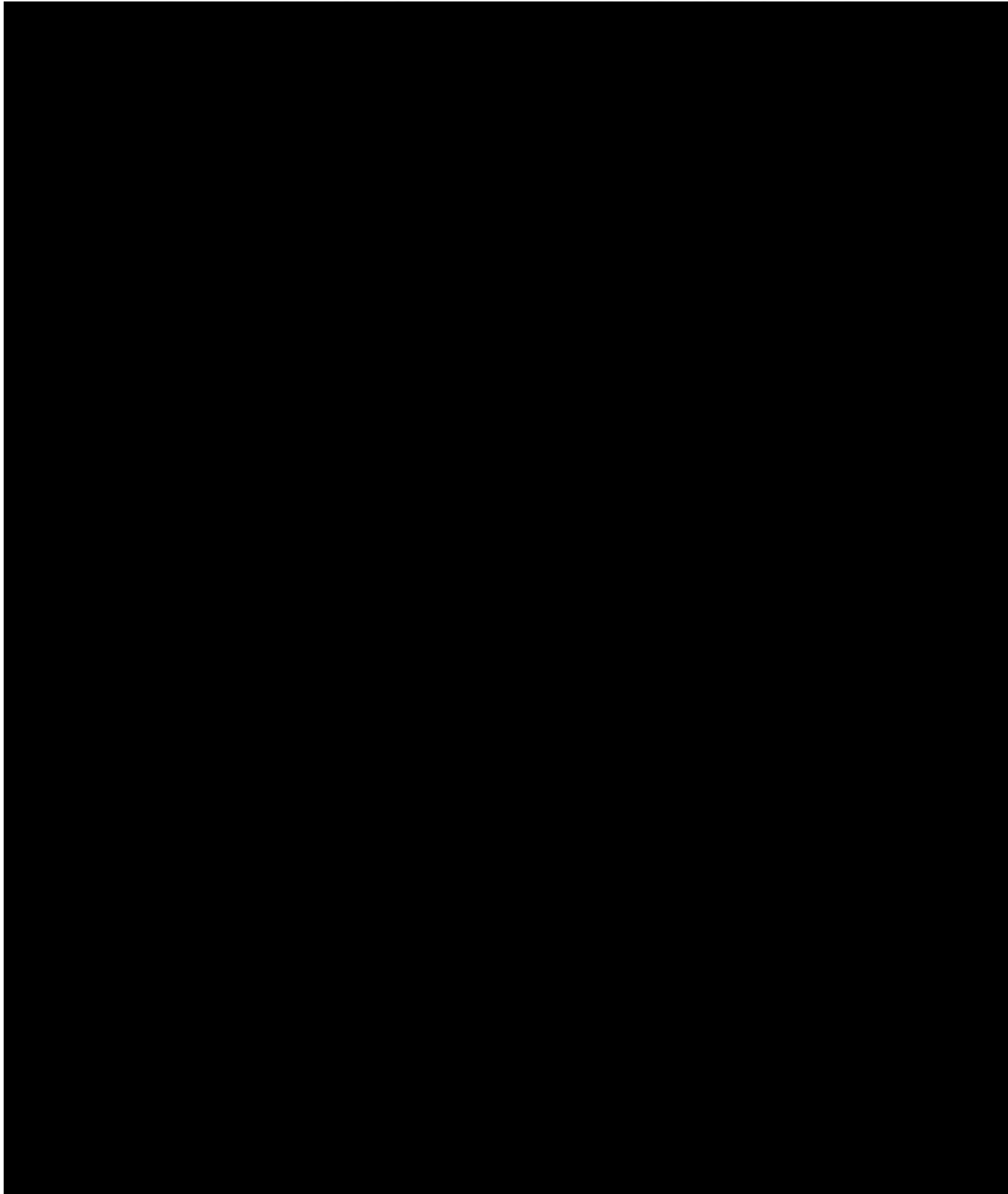
Item	Date
Scheduled Mechanical Completion	May 16, 2018
Guaranteed Substantial Completion	June 27, 2018
Guaranteed Commercial Operation Date	July 31, 2018
Guaranteed Final Completion Date	August 30, 2018

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Trimble County CCRT
Exhibit E – ACCEPTABLE EQUIPMENT AND MATERIAL SUPPLIERS
Engineering Procurement and Construction Agreement

LG&E
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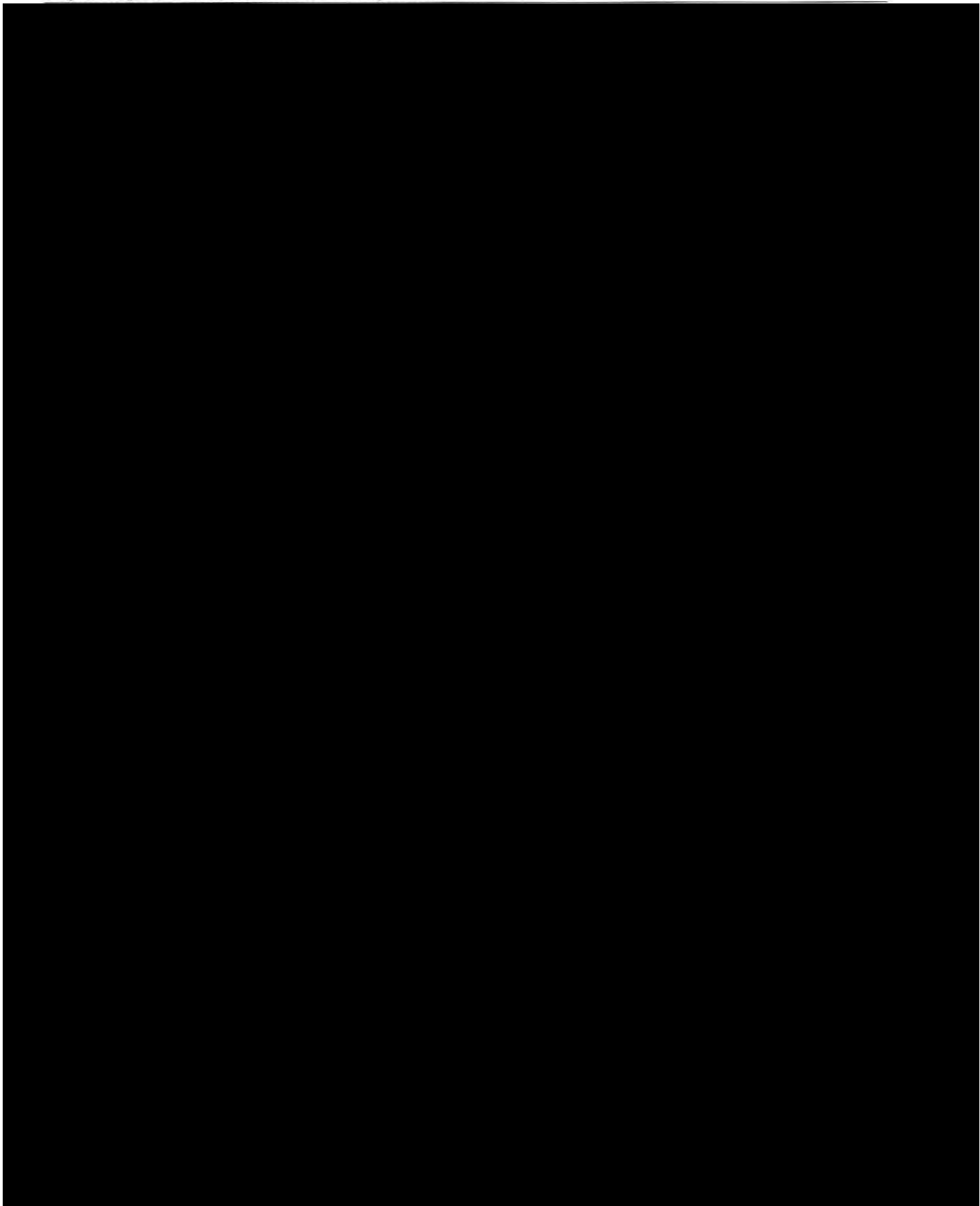
EXHIBIT E
ACCEPTABLE EQUIPMENT AND MATERIAL SUPPLIERS



ajc *BE*

Trimble County CCRT
Exhibit E – ACCEPTABLE EQUIPMENT AND MATERIAL SUPPLIERS
Engineering Procurement and Construction Agreement

LG&E
KU

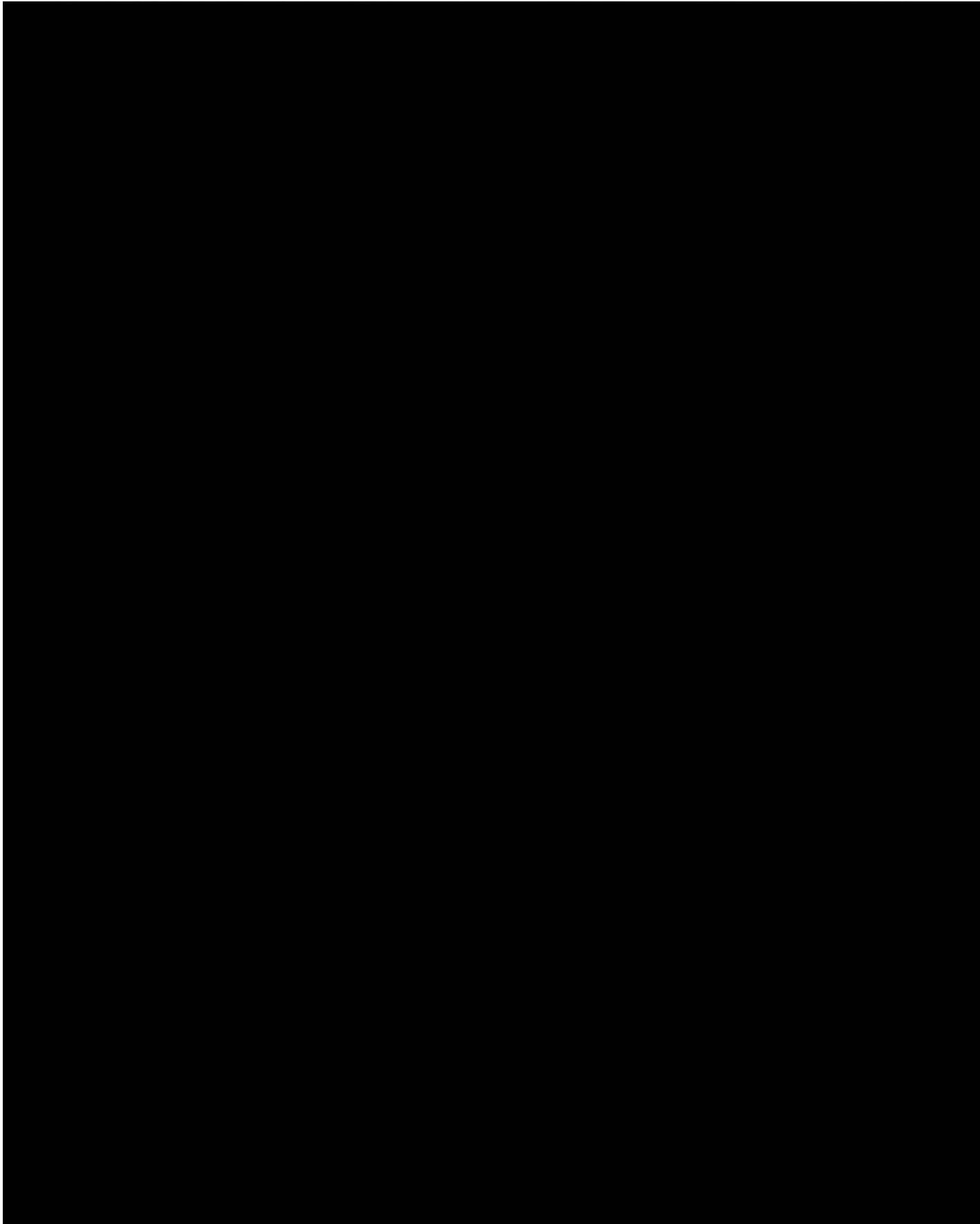


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Trimble County CCRT
Exhibit E – ACCEPTABLE EQUIPMENT AND MATERIAL SUPPLIERS
Engineering Procurement and Construction Agreement

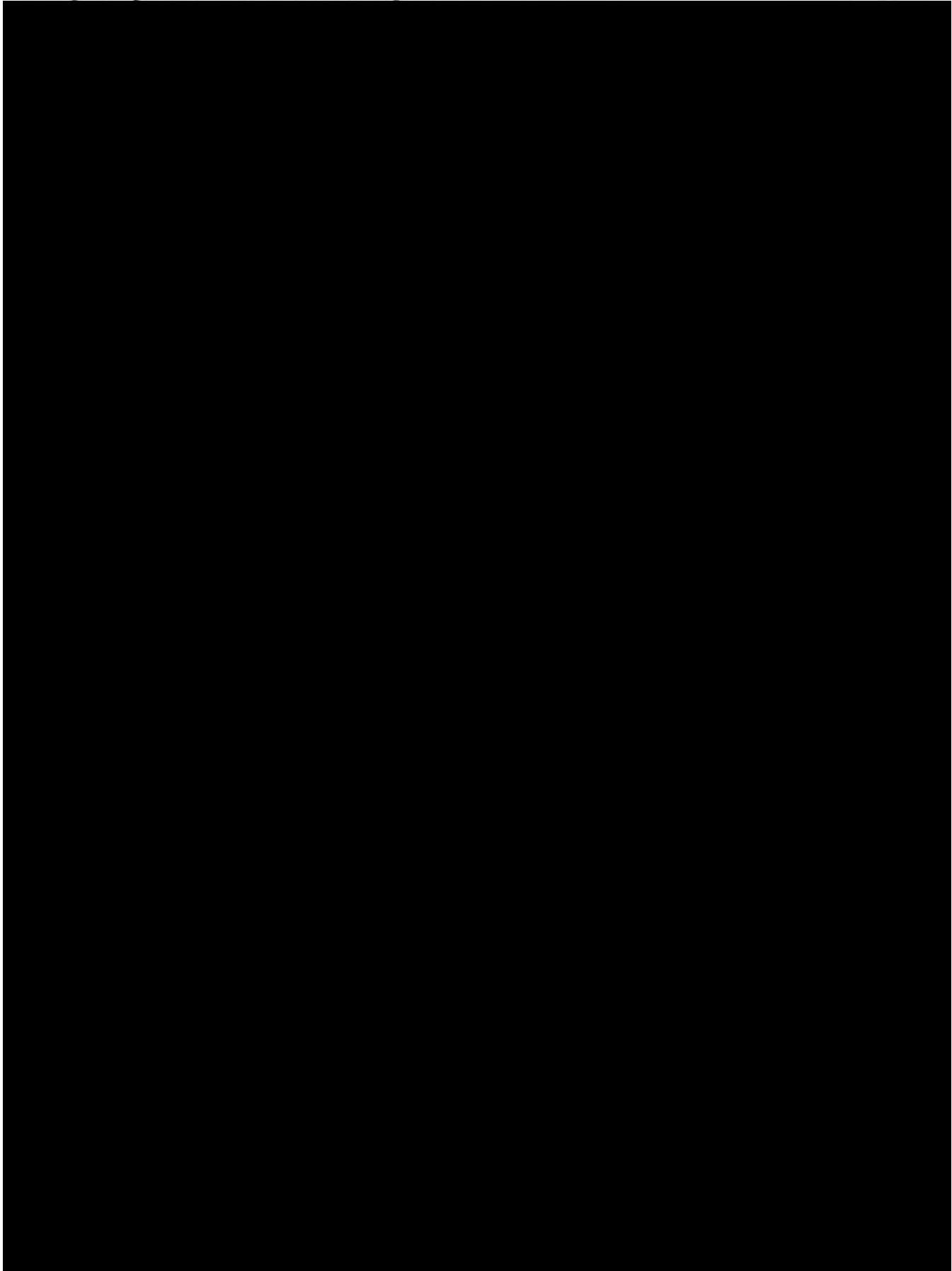
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Trimble County CCRT
Exhibit E – ACCEPTABLE EQUIPMENT AND MATERIAL SUPPLIERS
Engineering Procurement and Construction Agreement

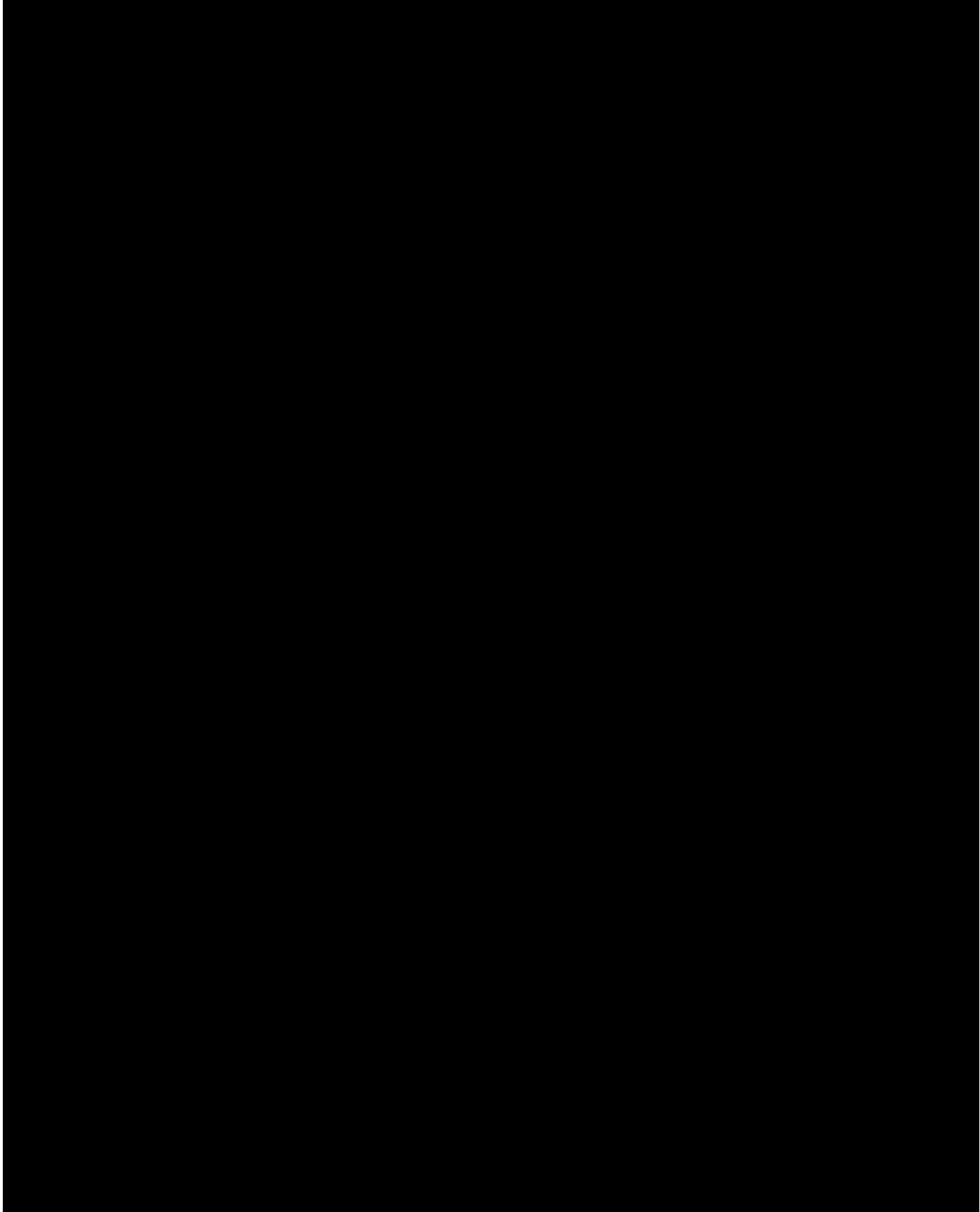
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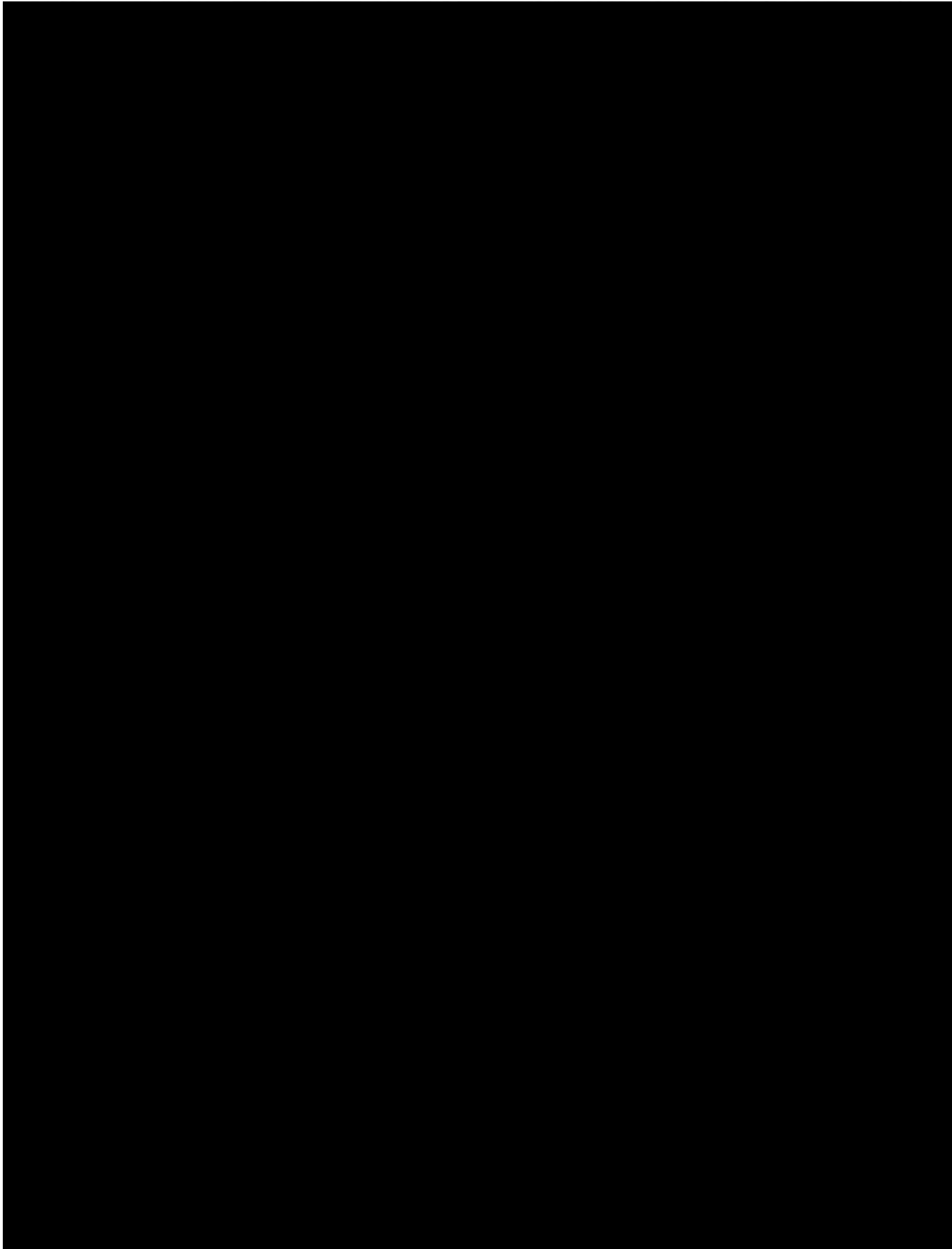
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Trimble County CCRT
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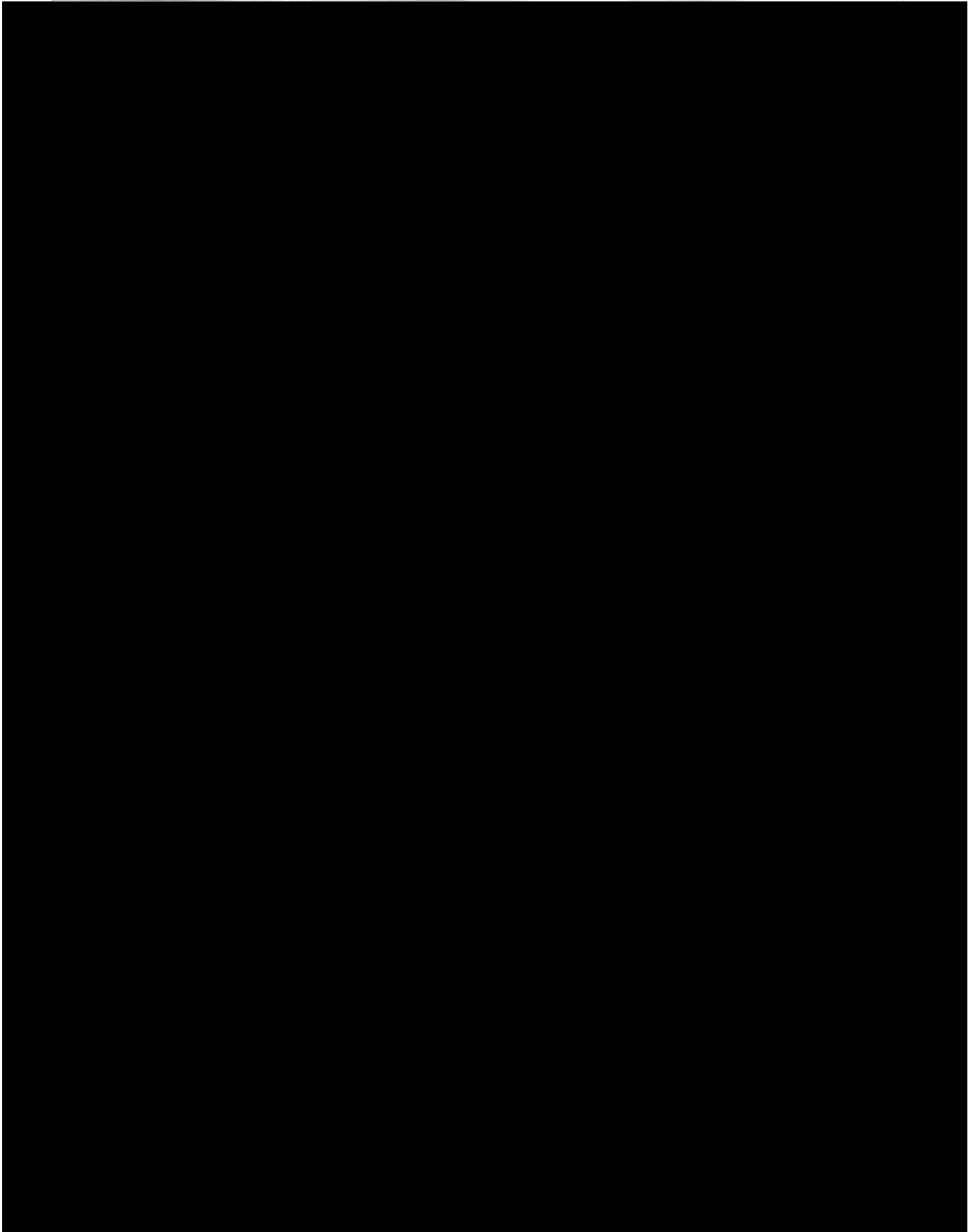


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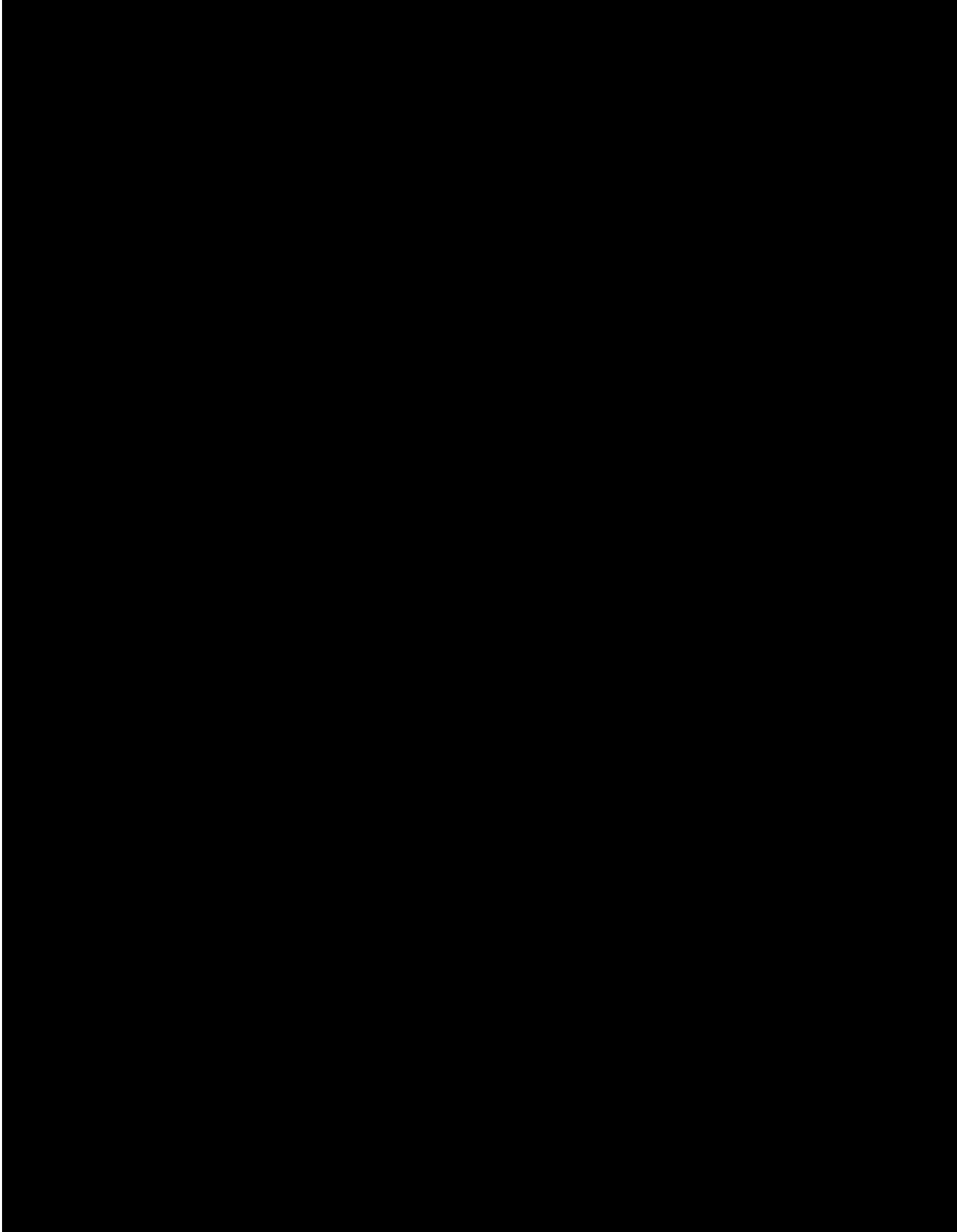
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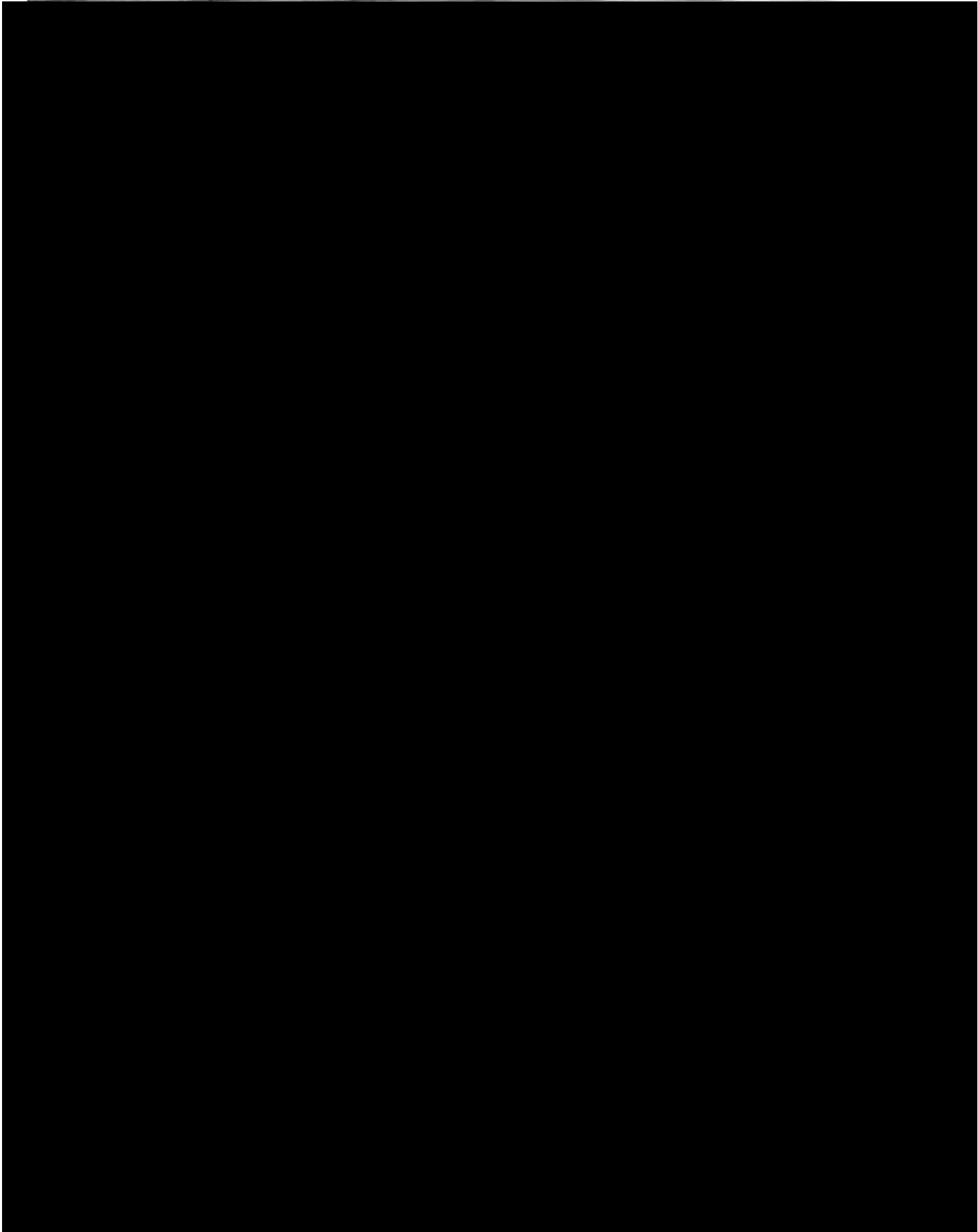
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Engineering Procurement and Construction Agreement

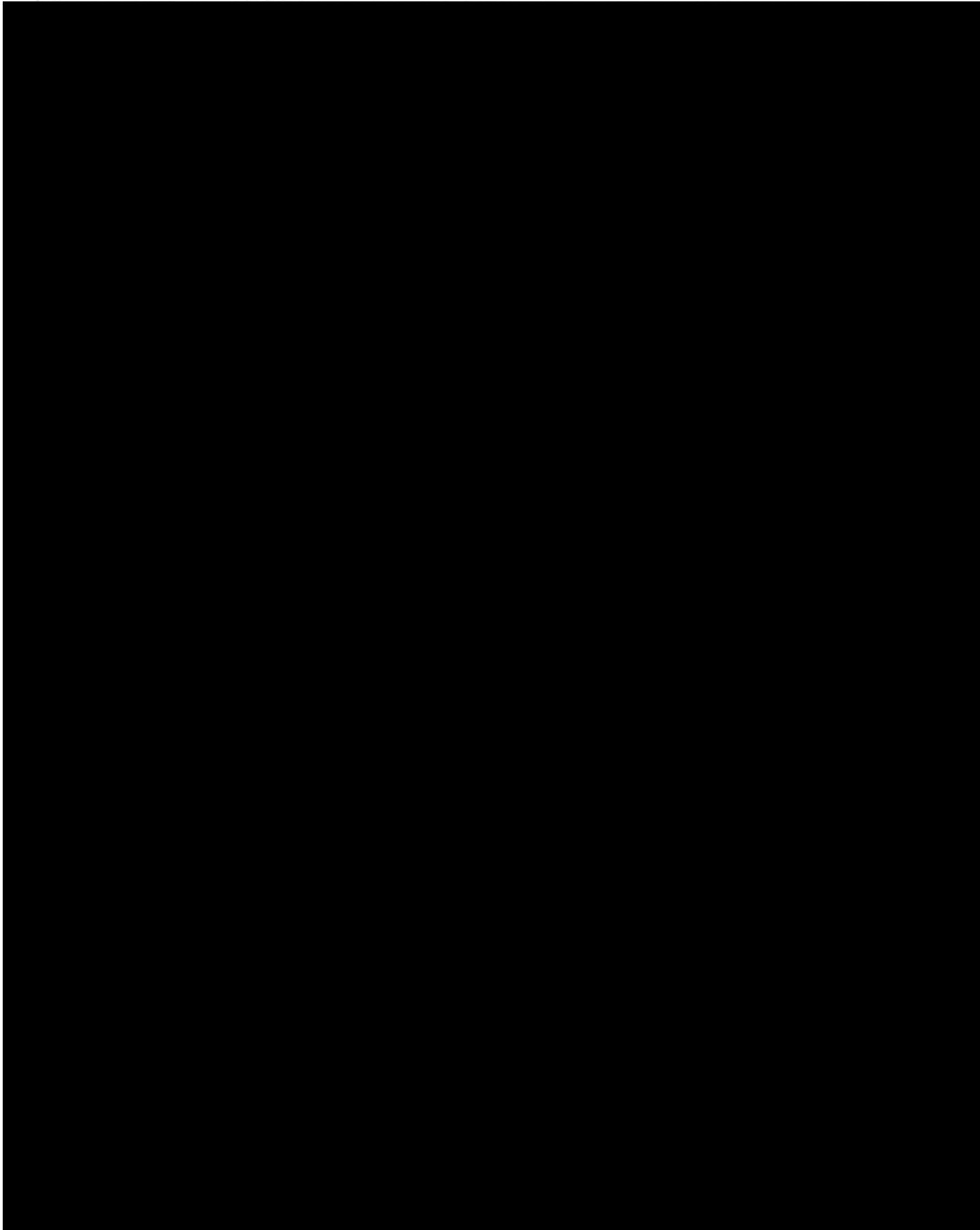
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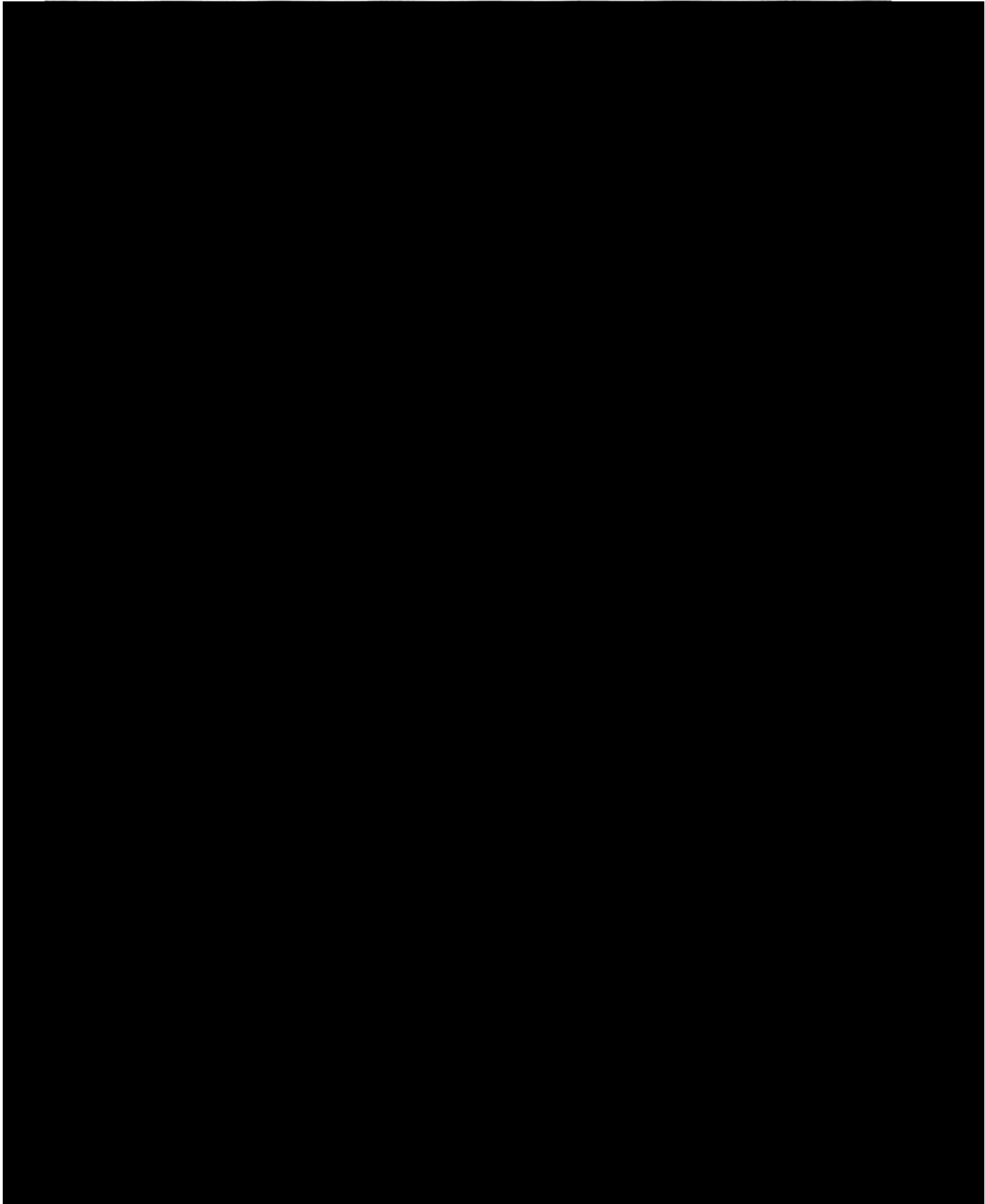
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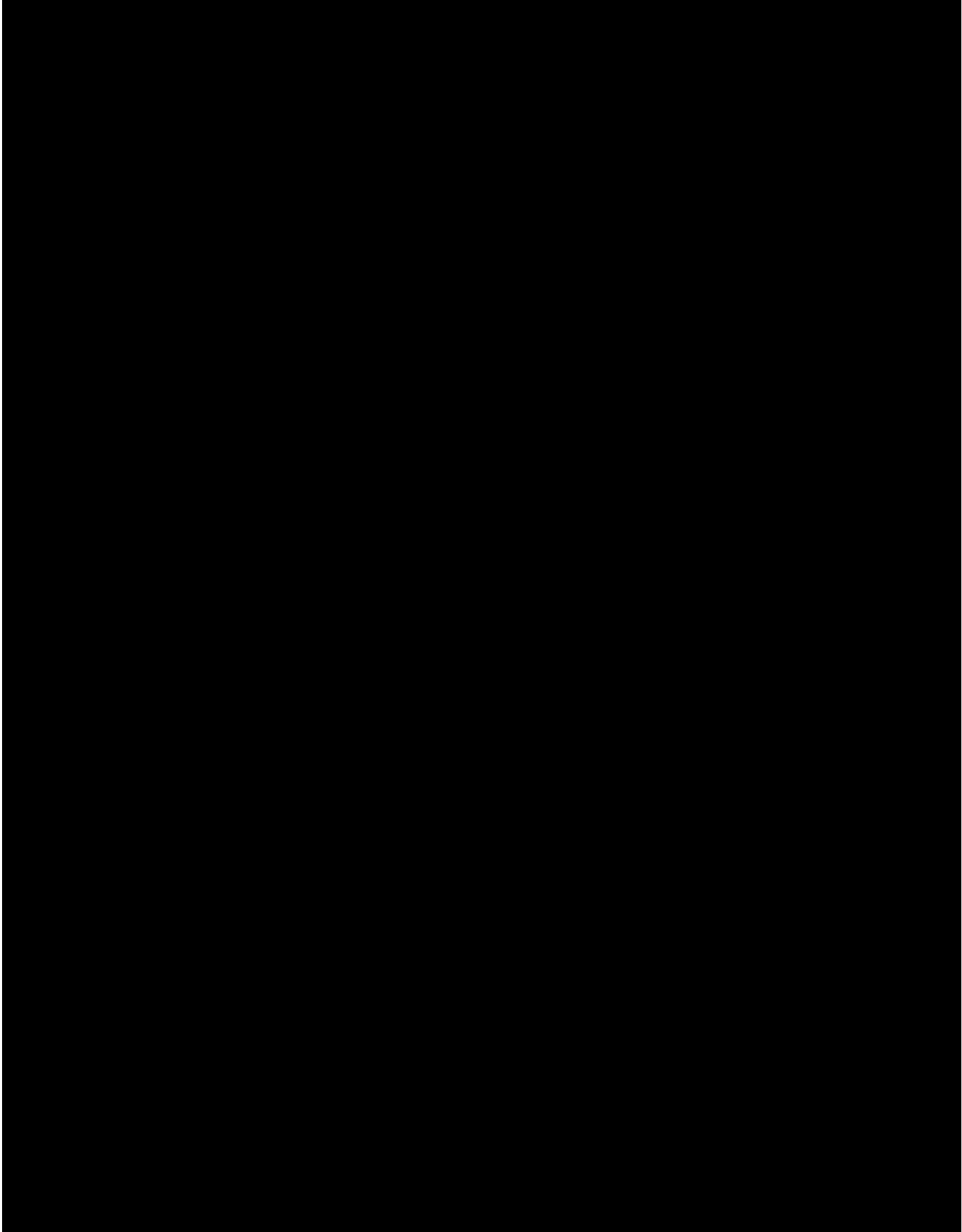


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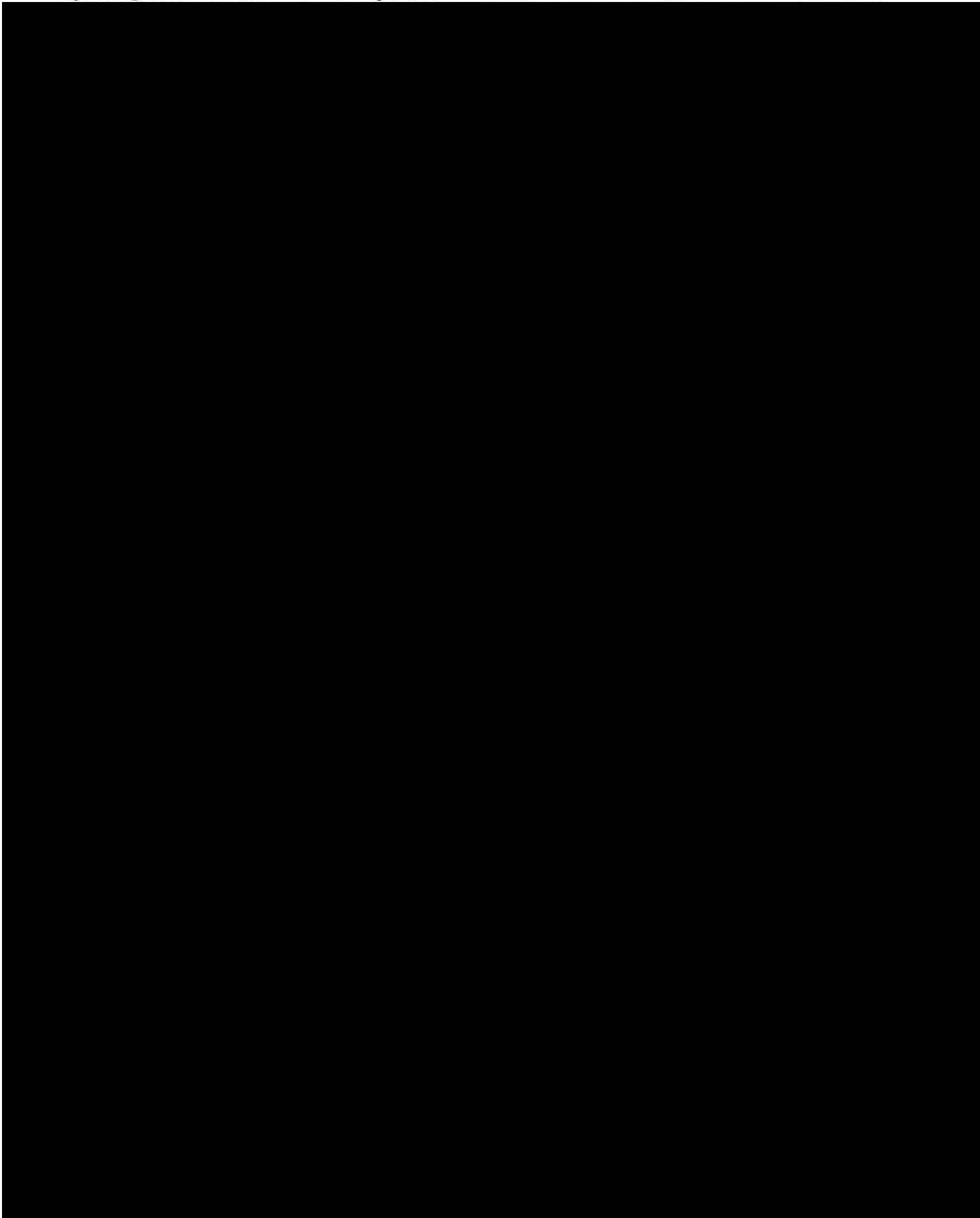
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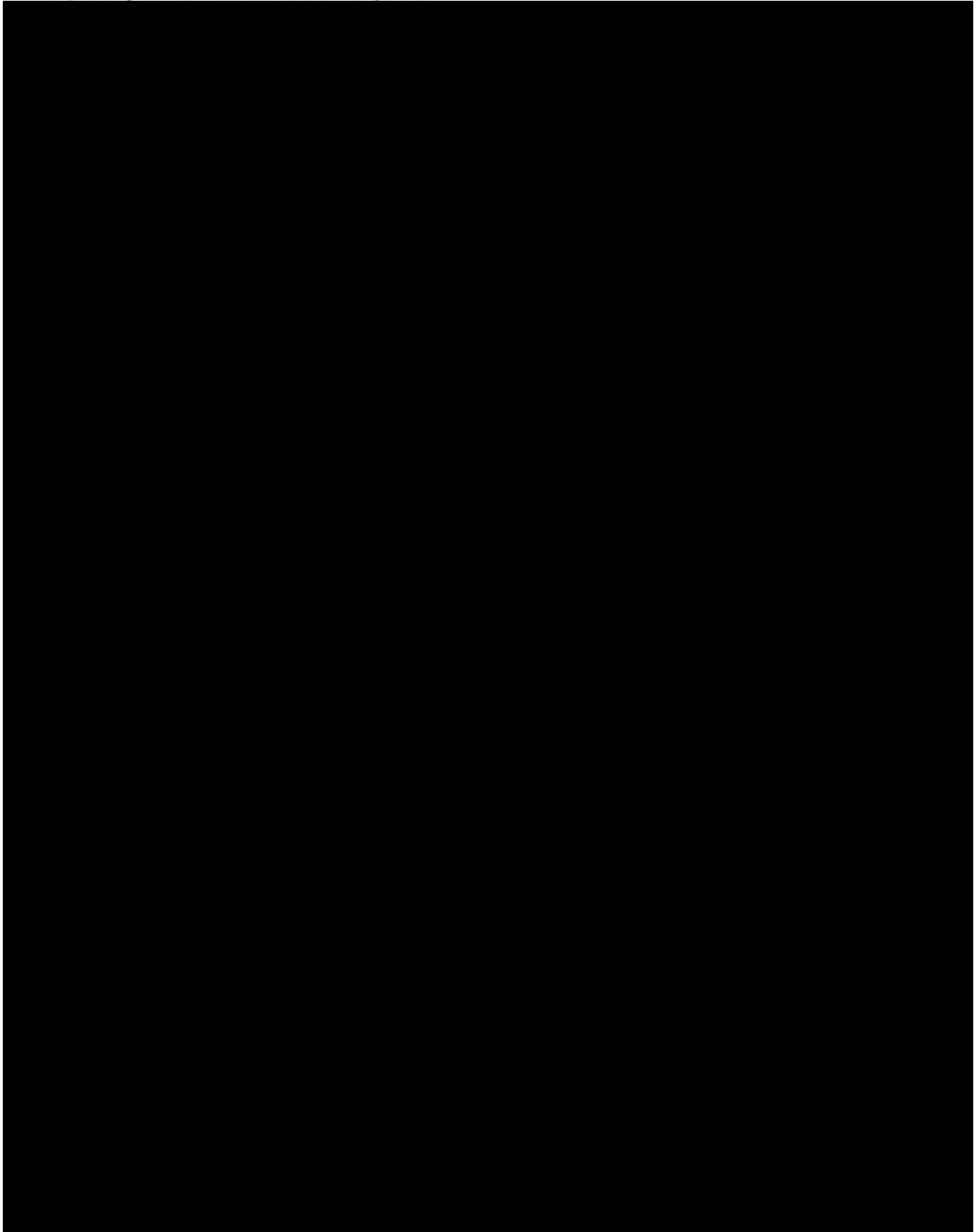
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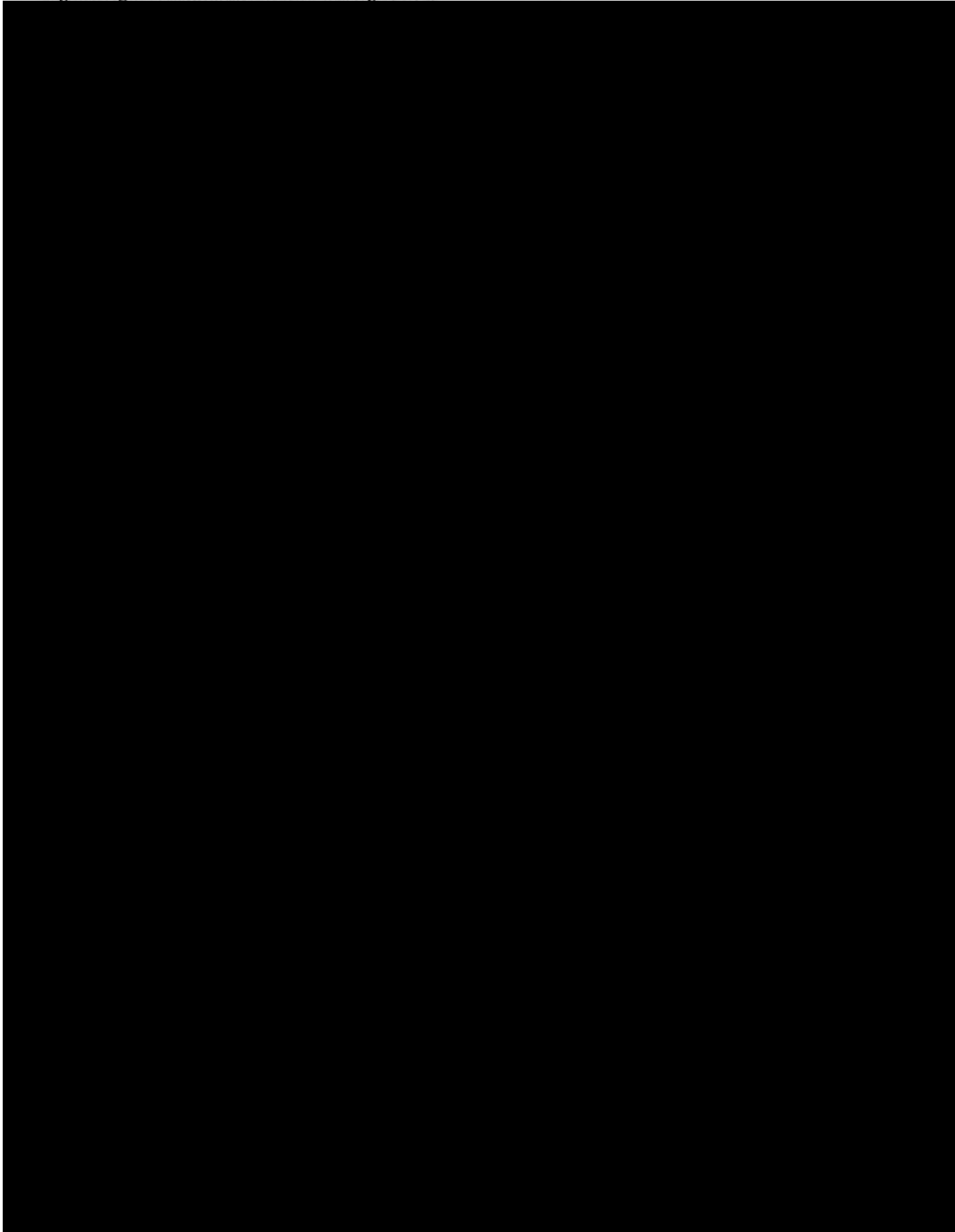
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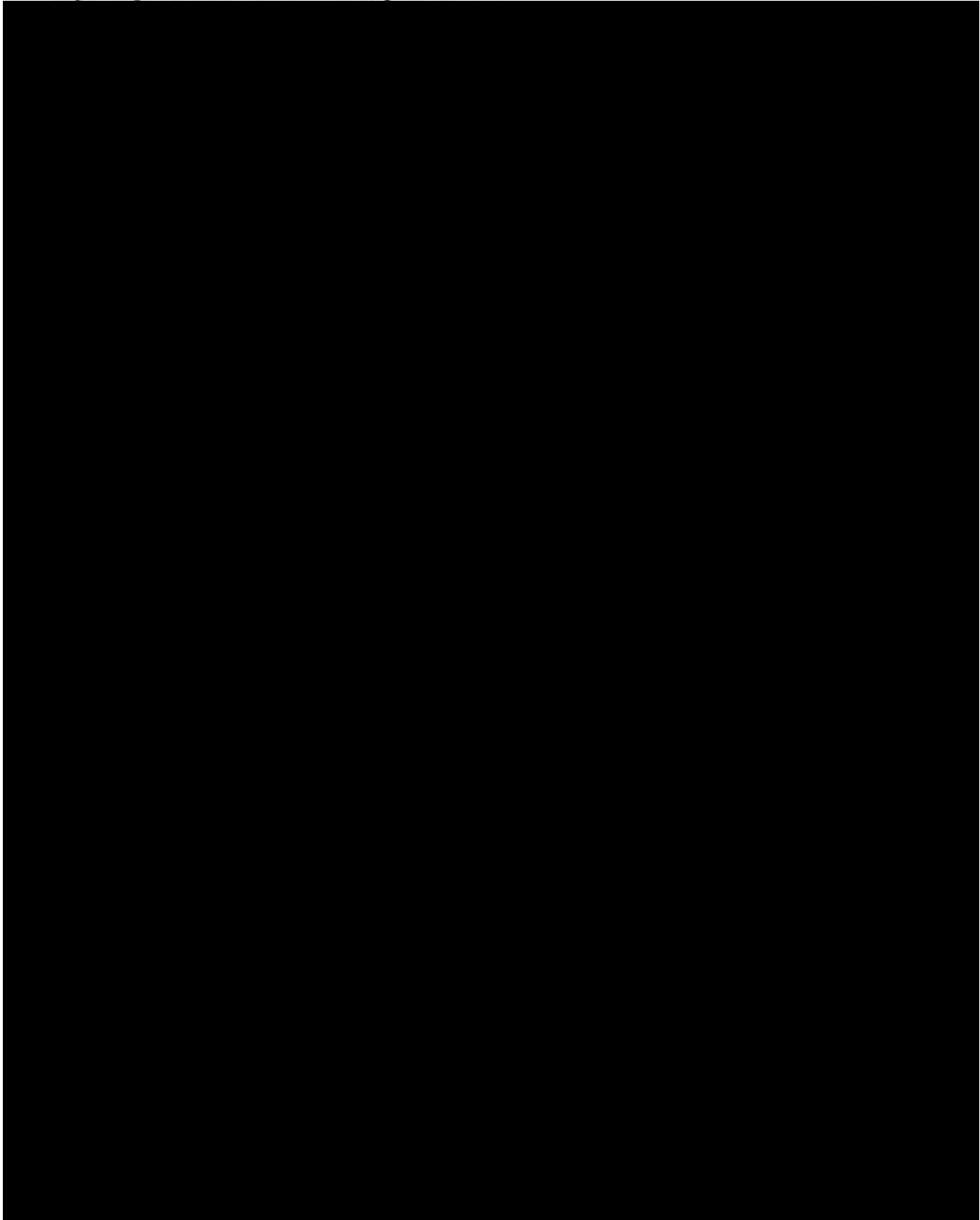
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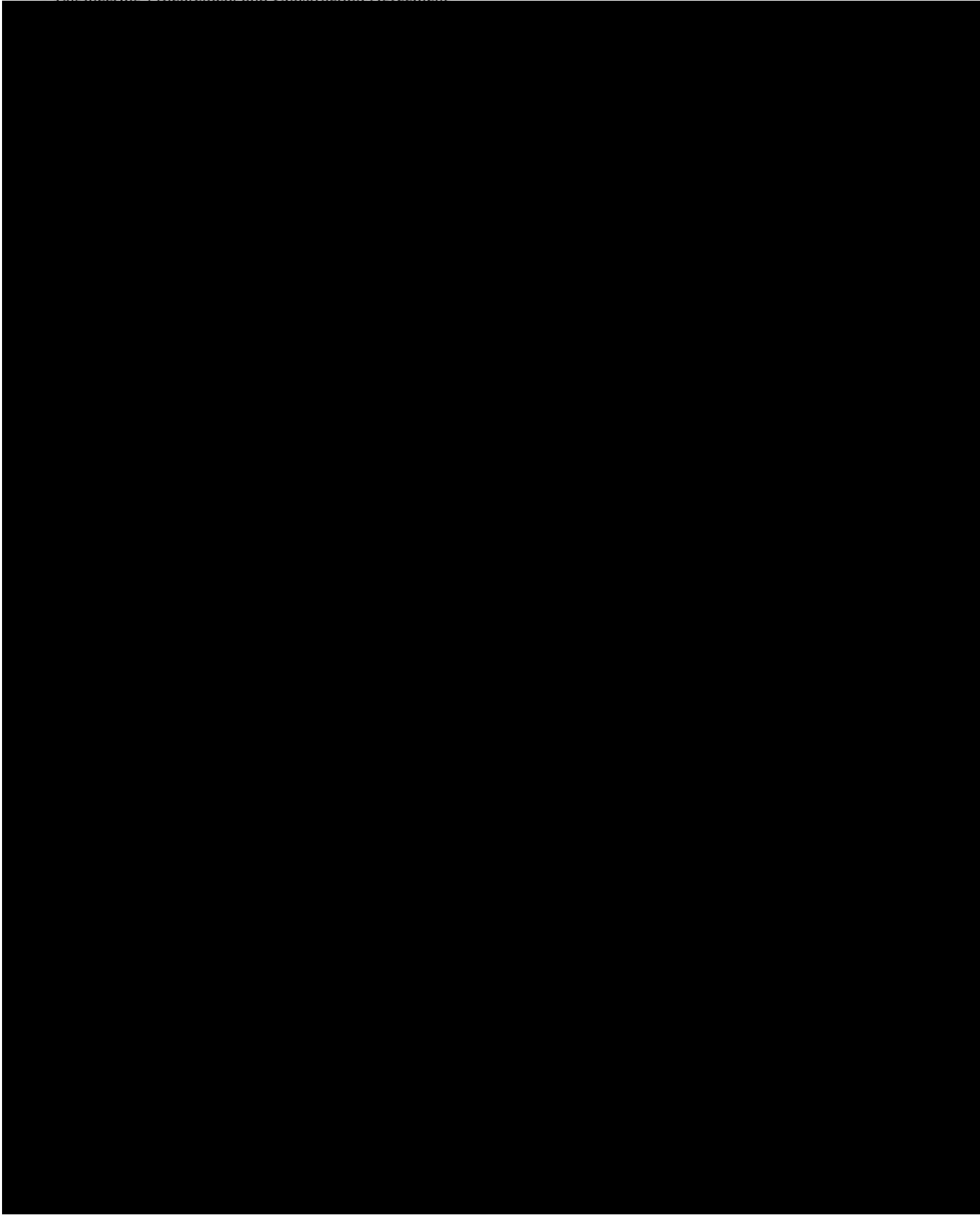
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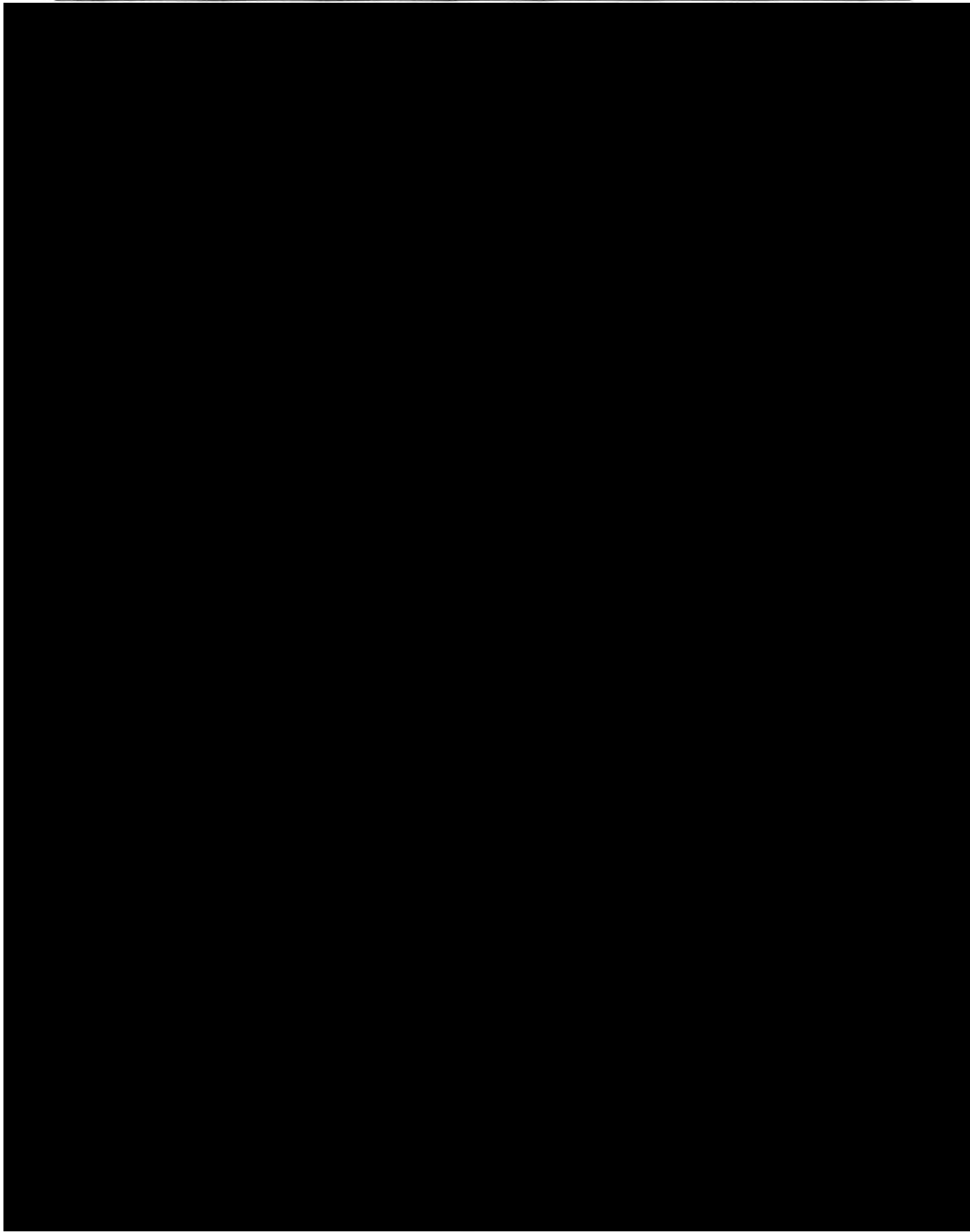
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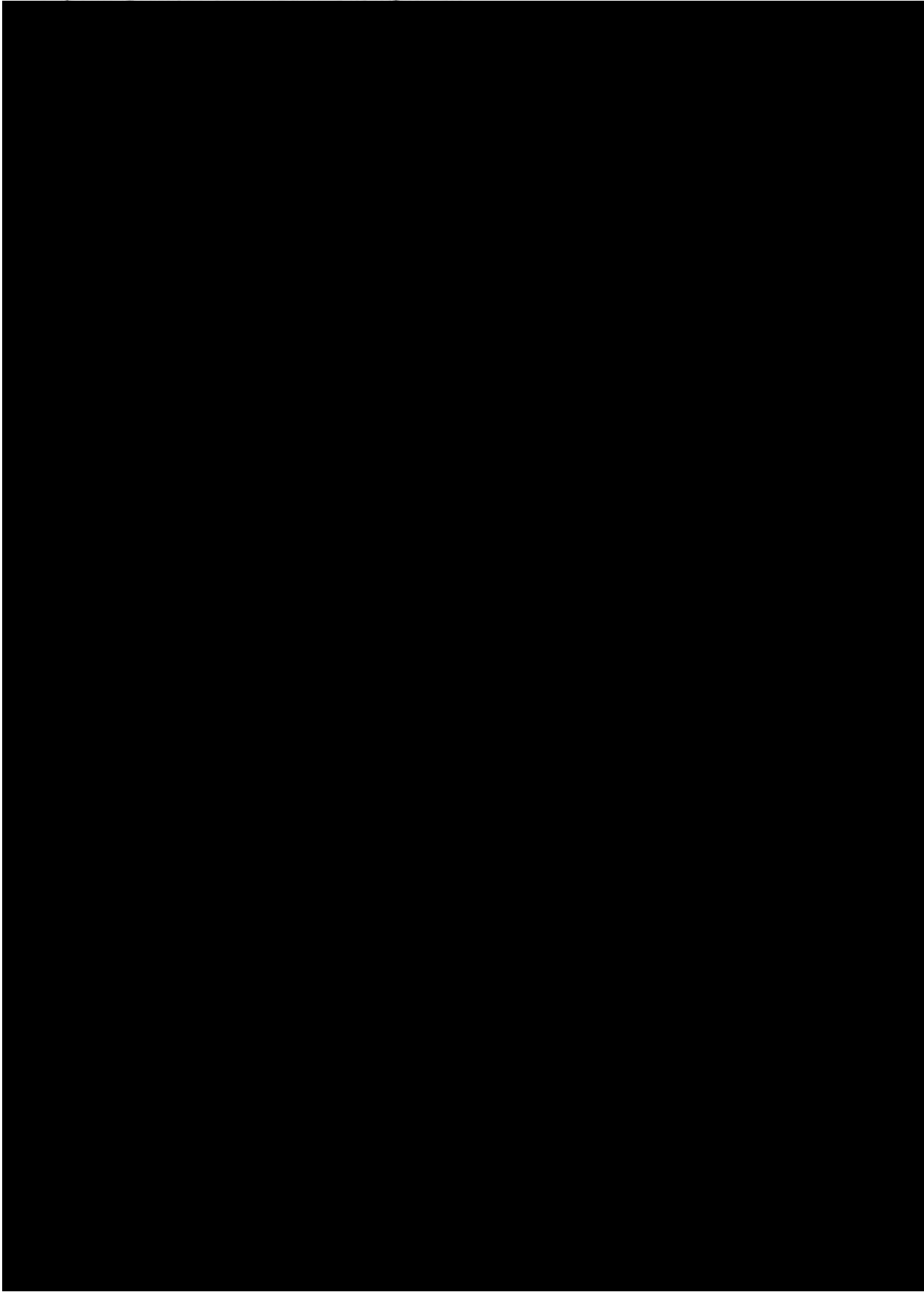
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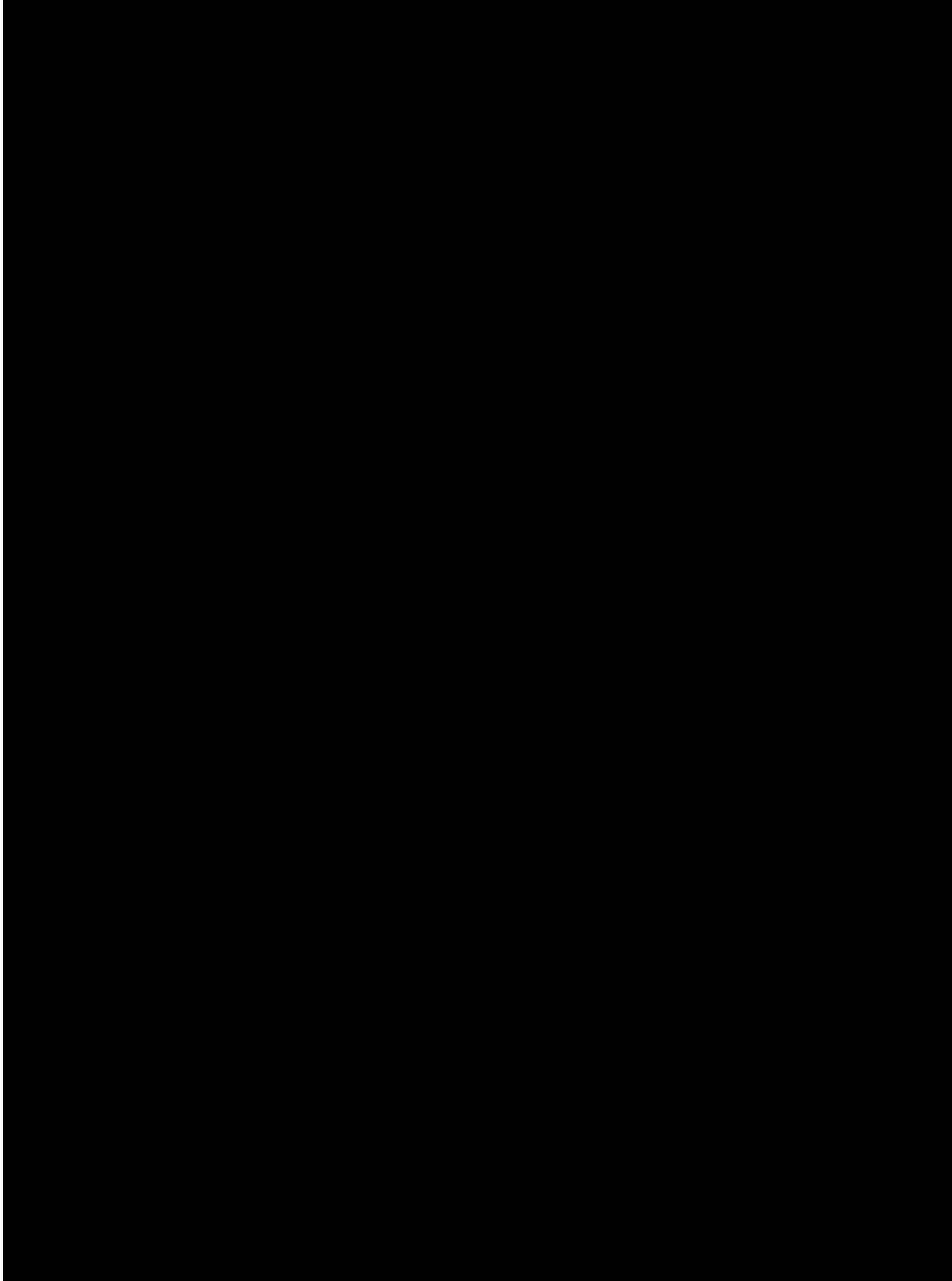
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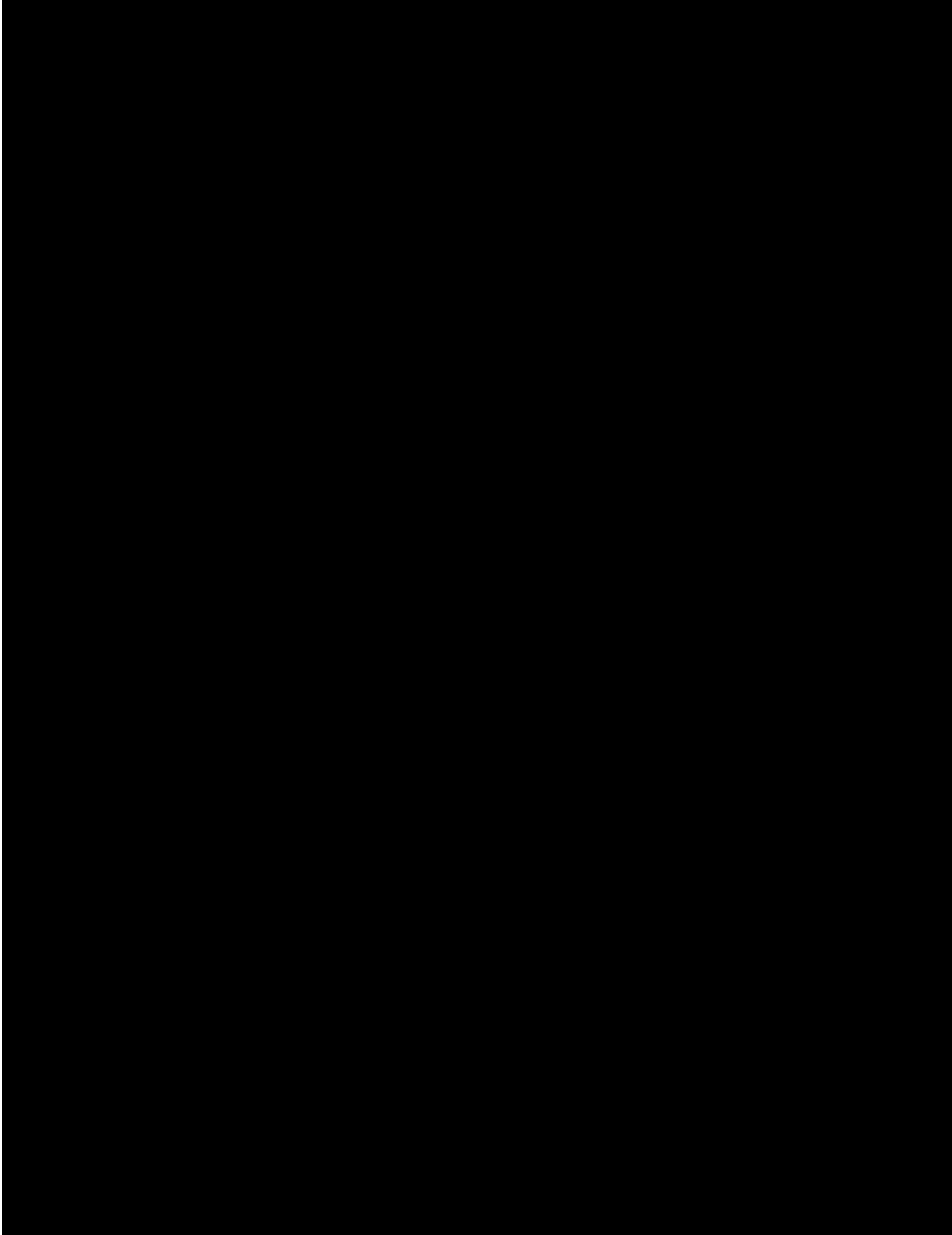
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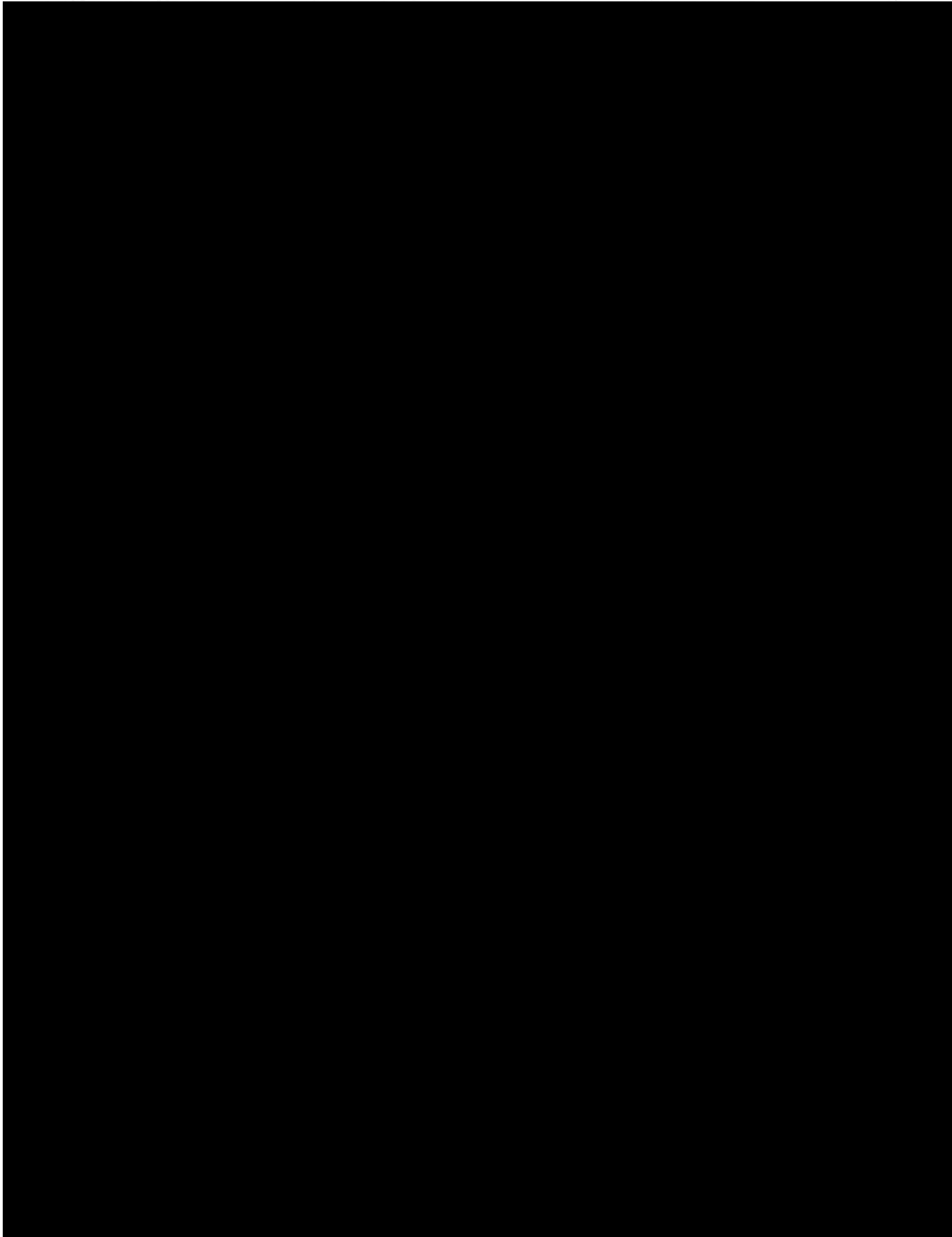
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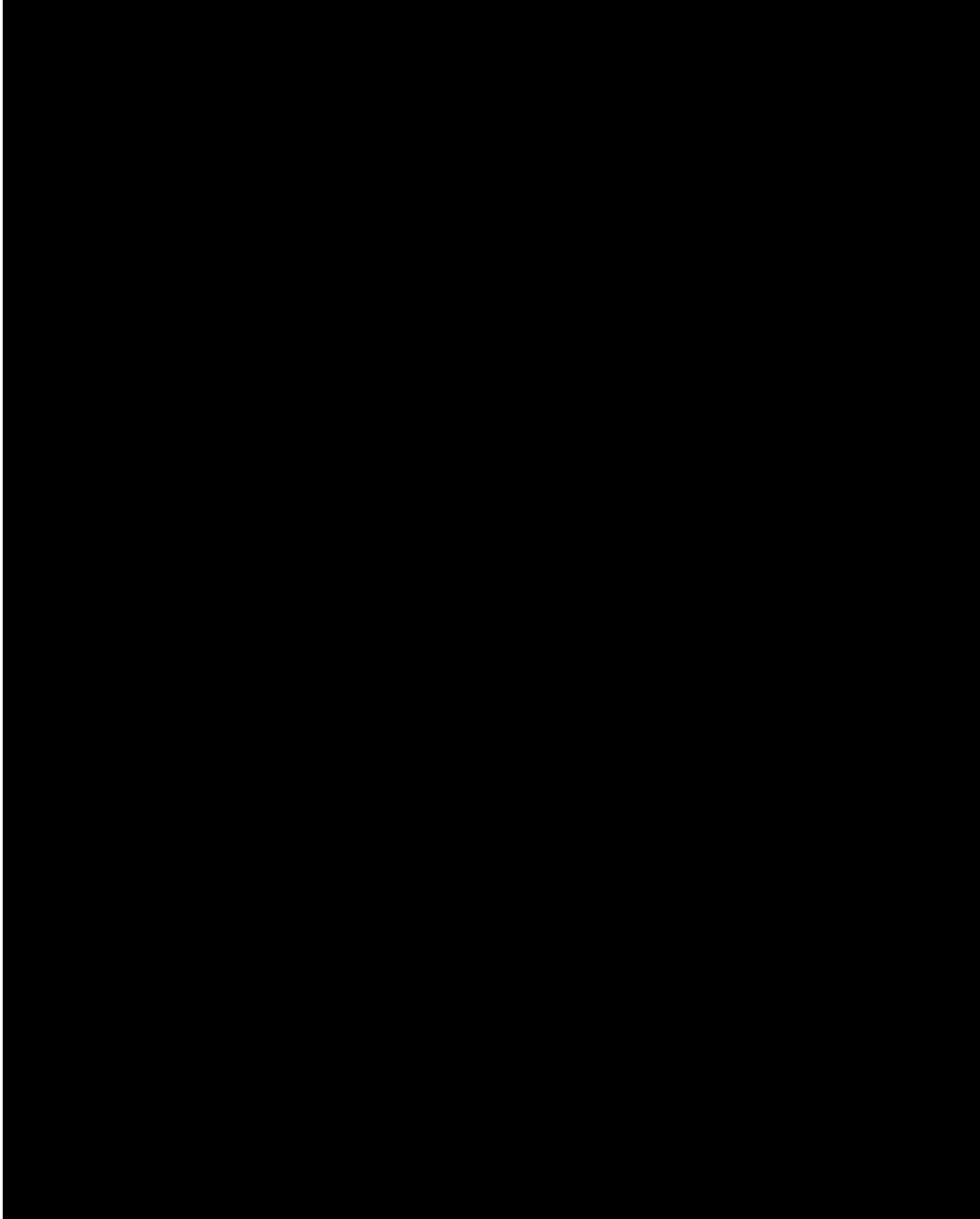
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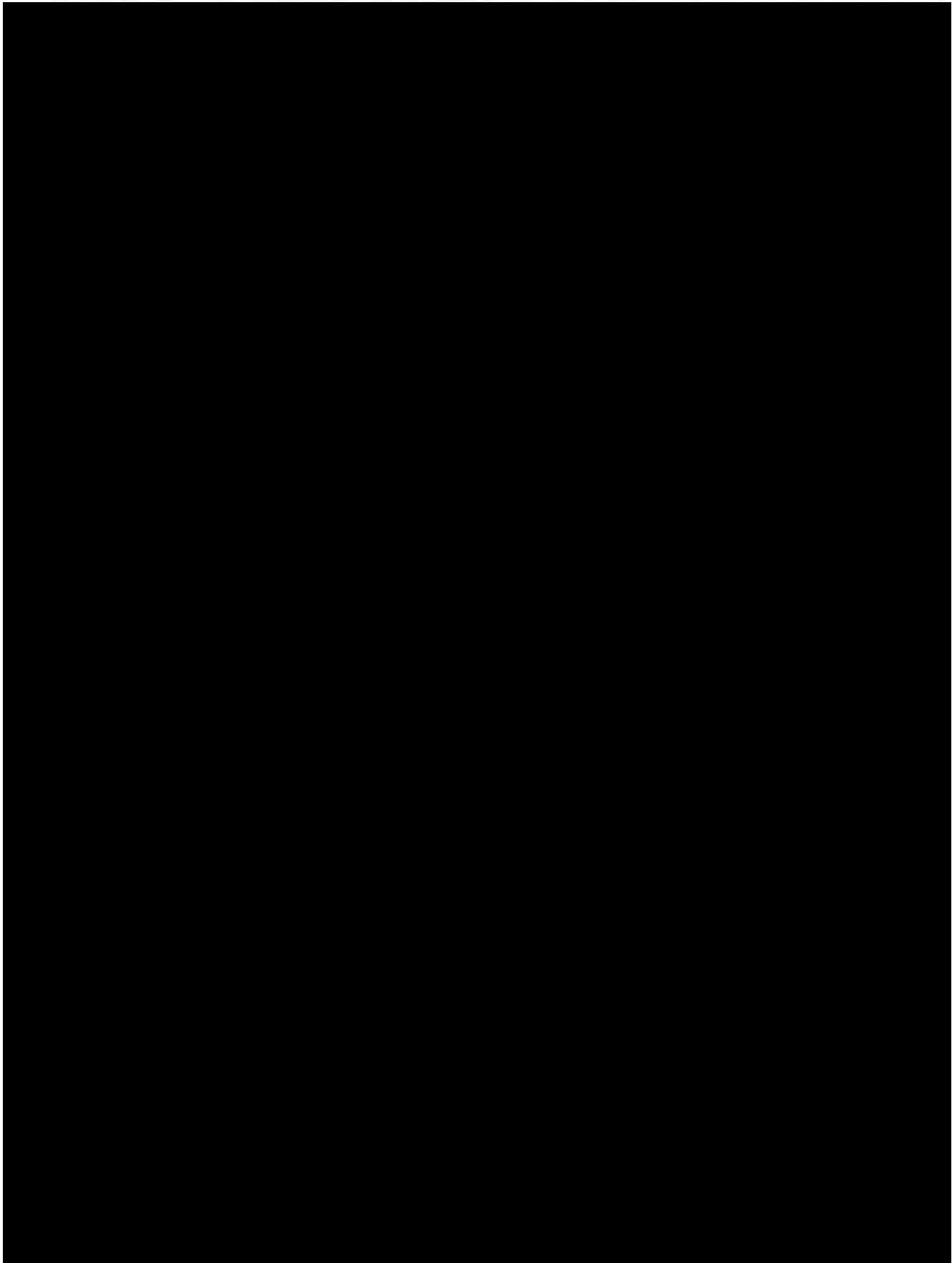
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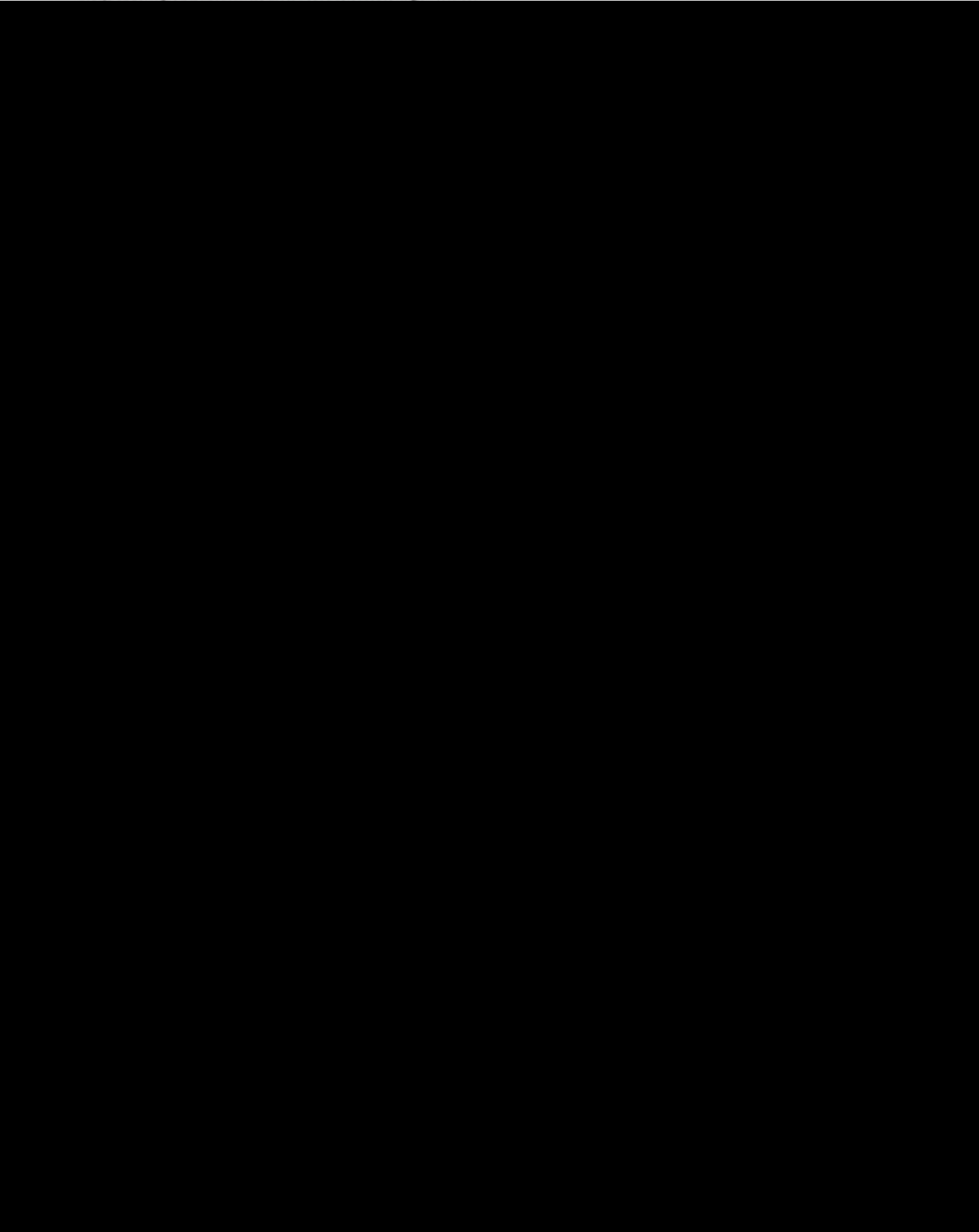
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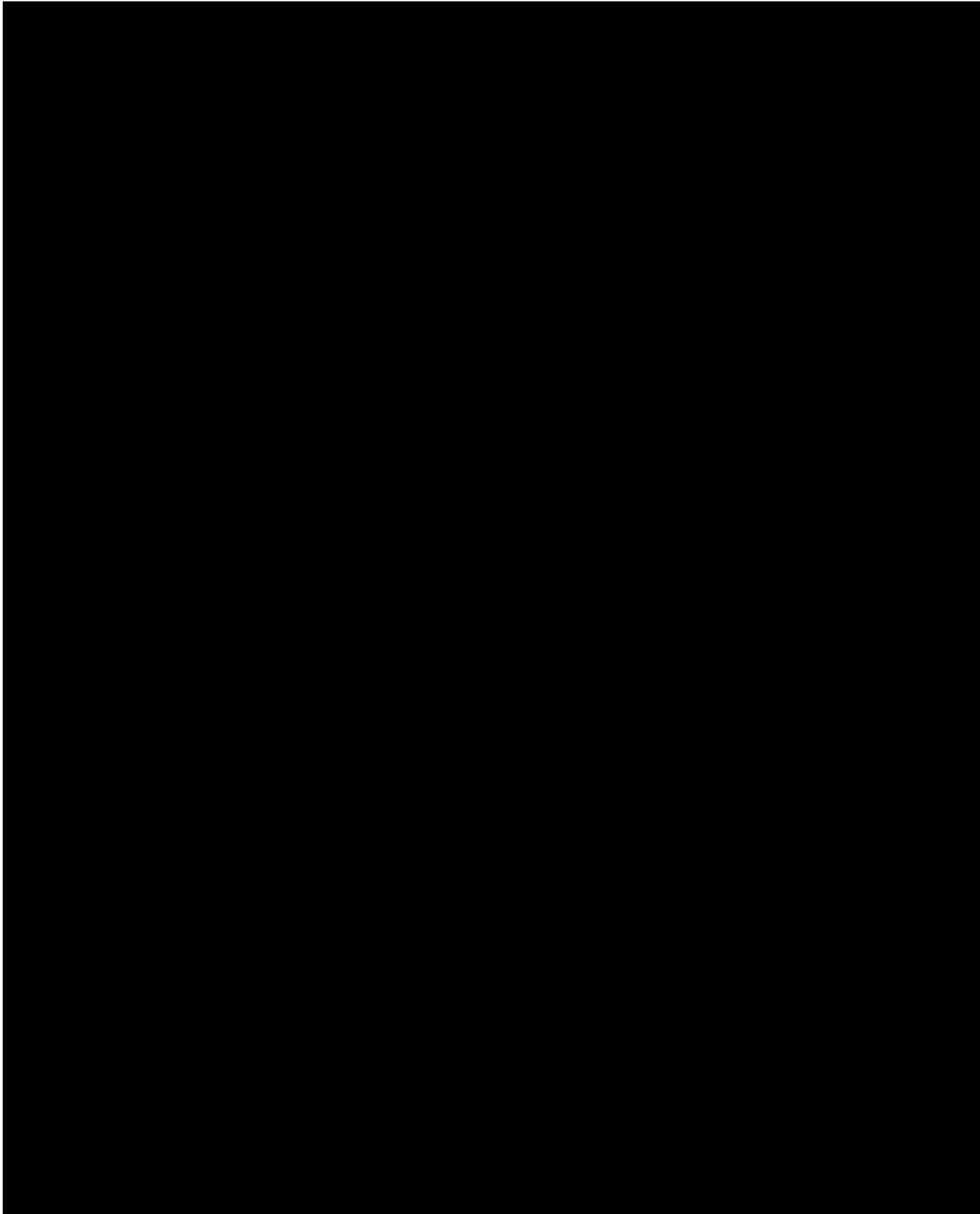
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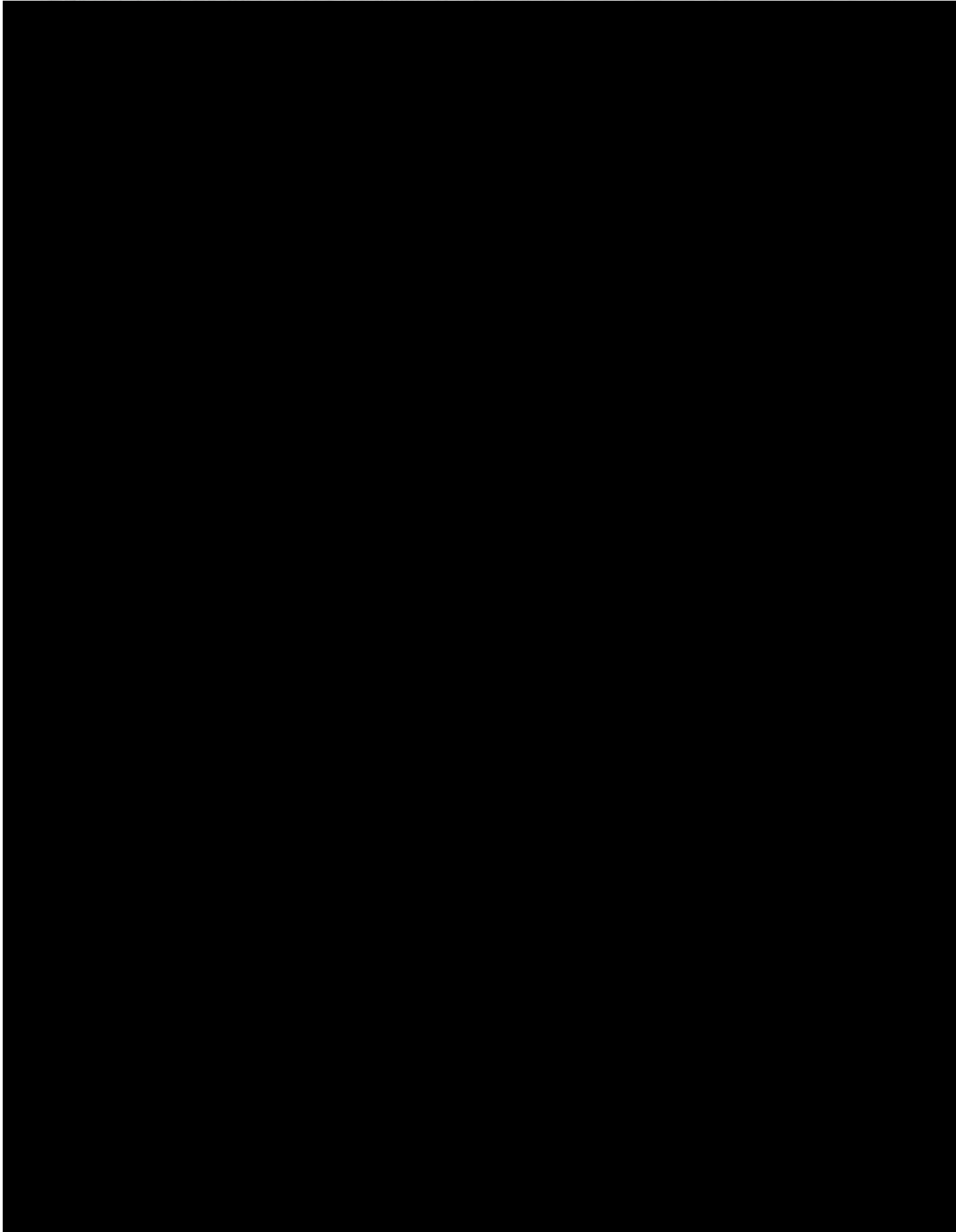
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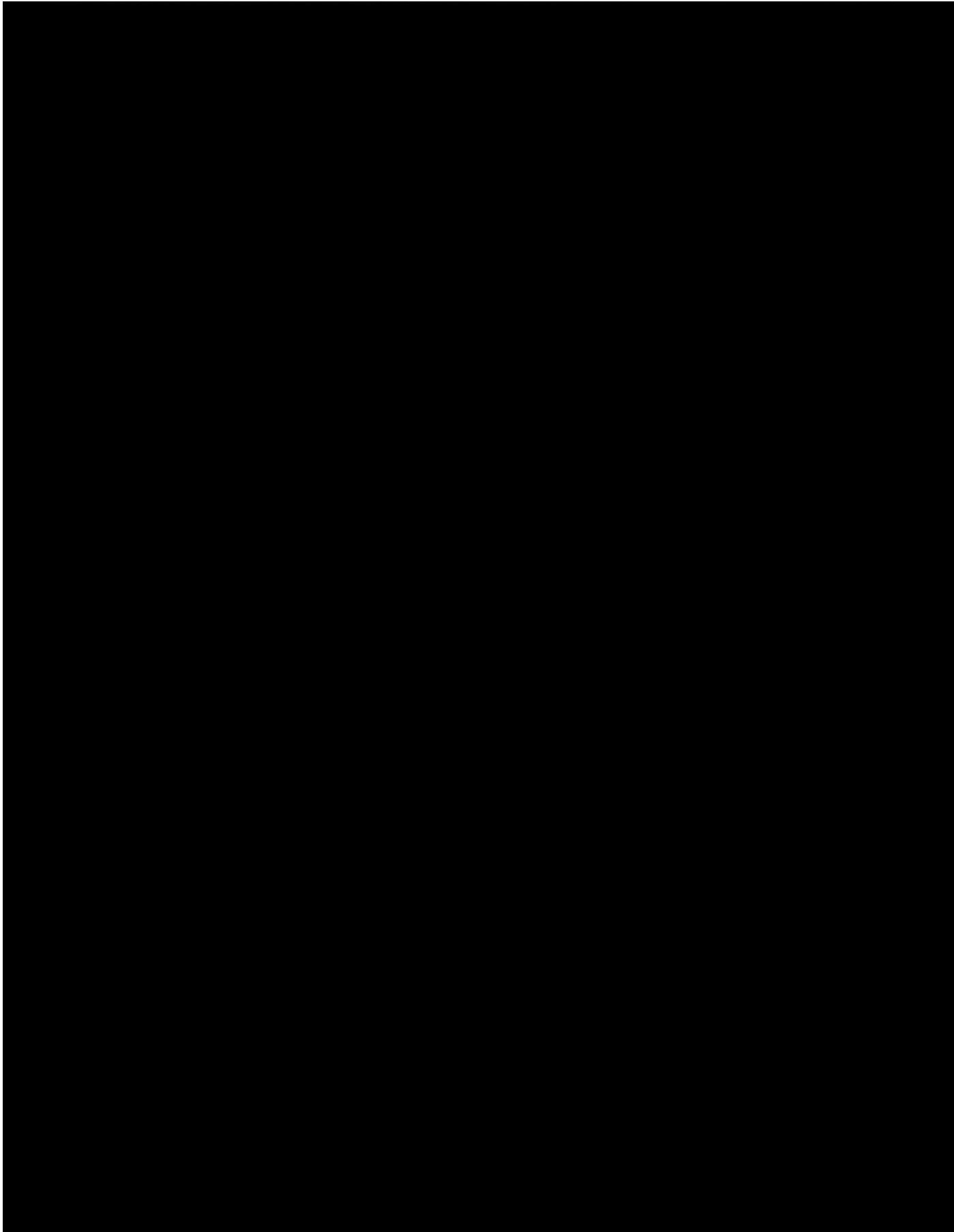
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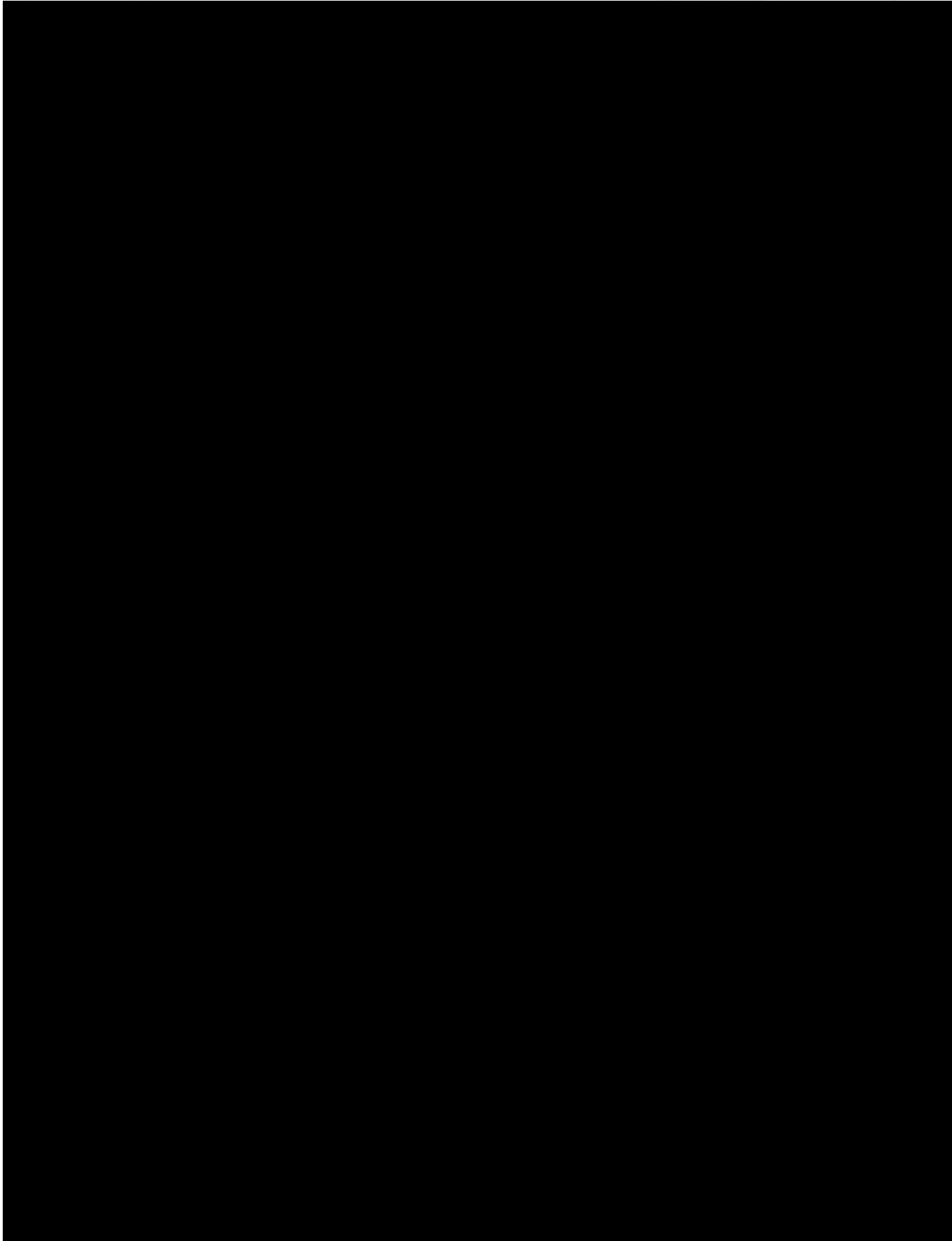
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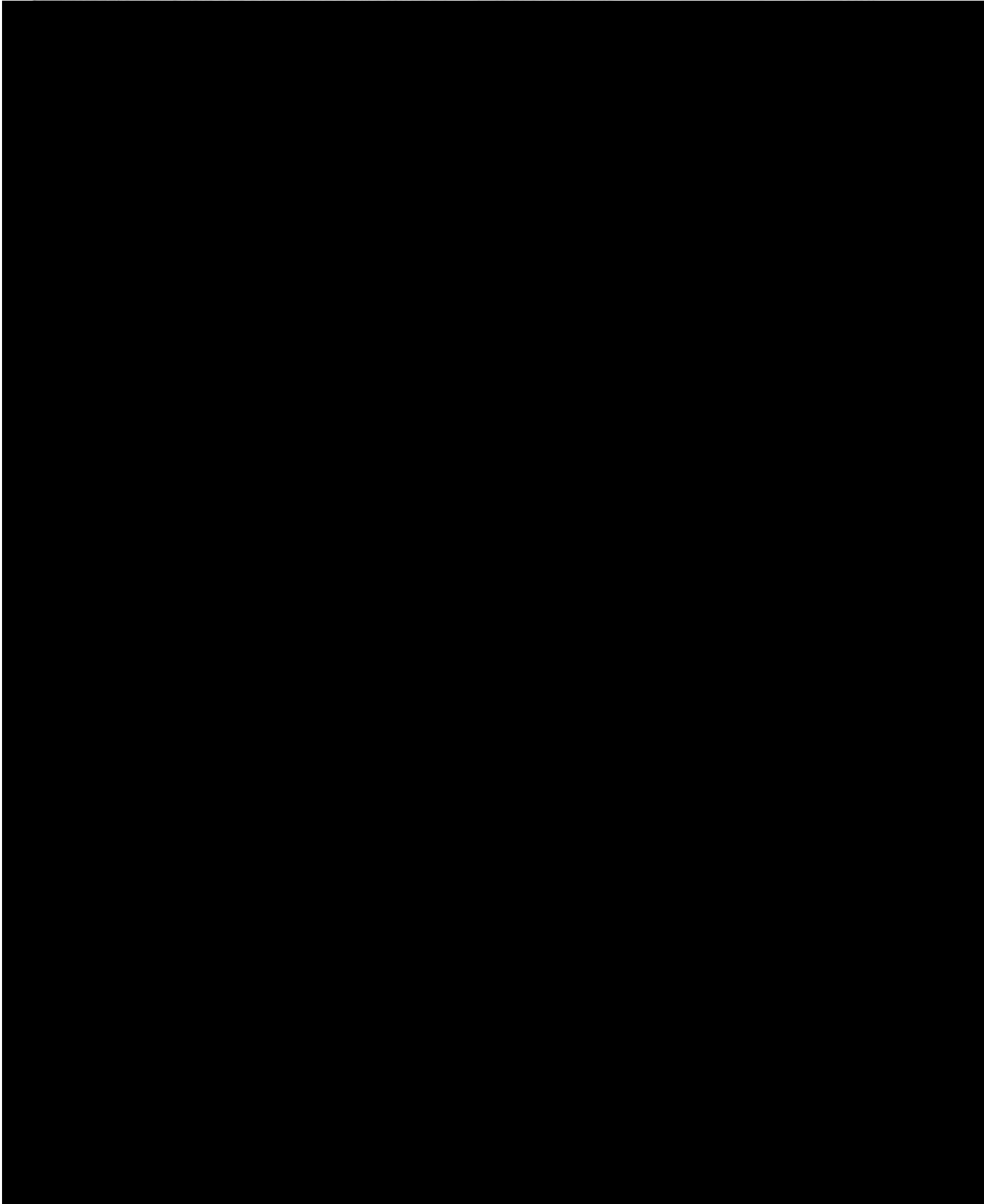
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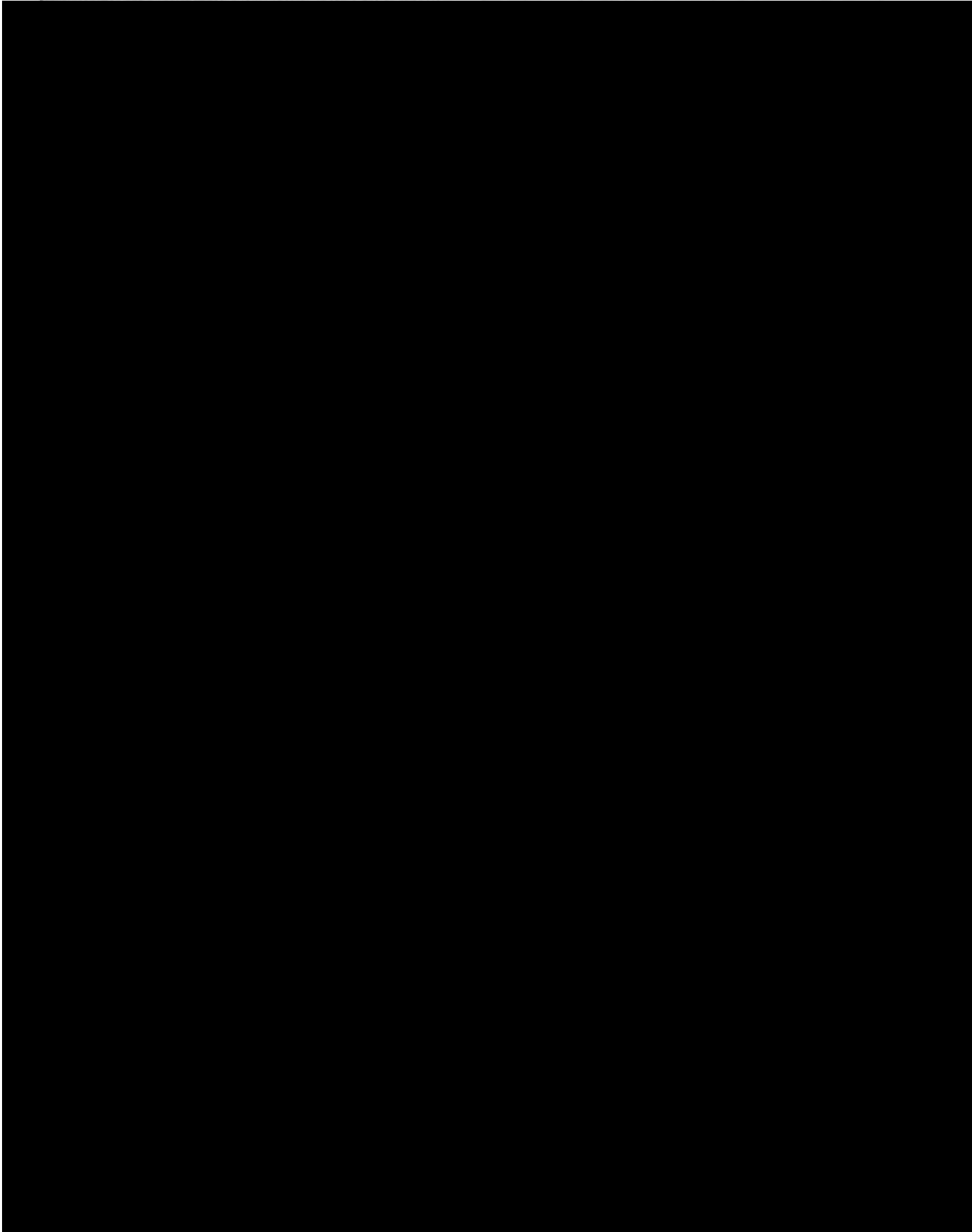
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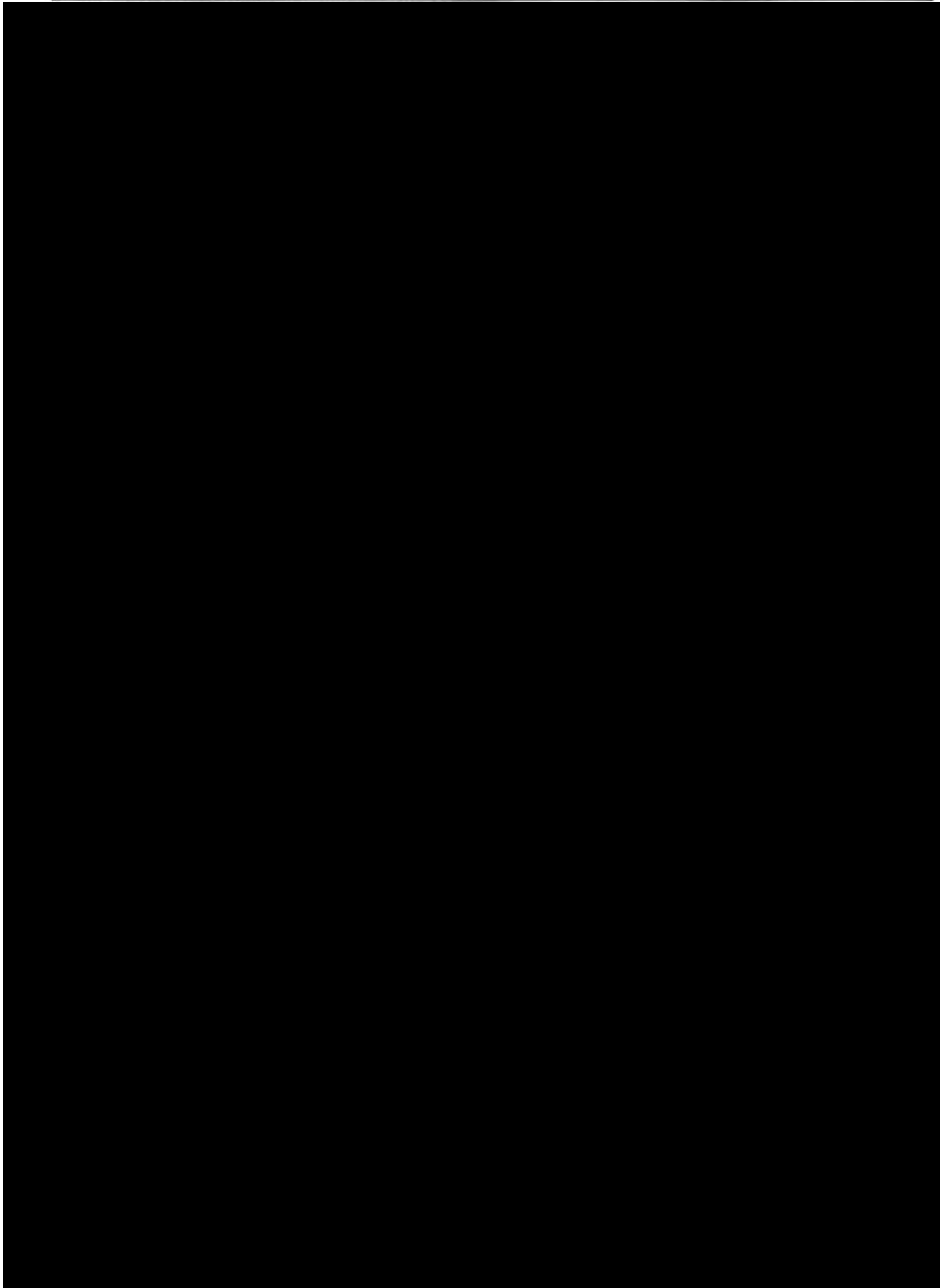
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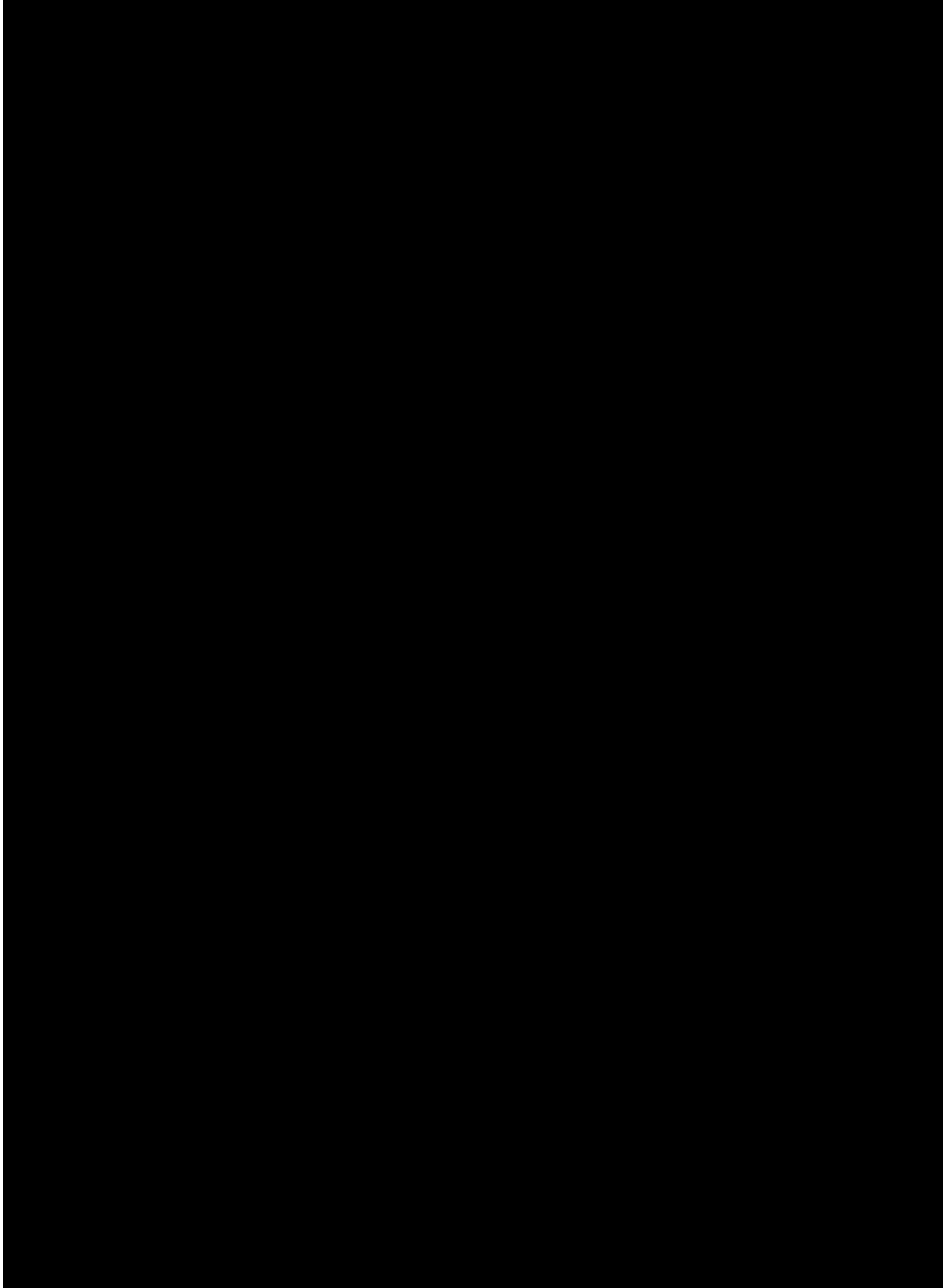
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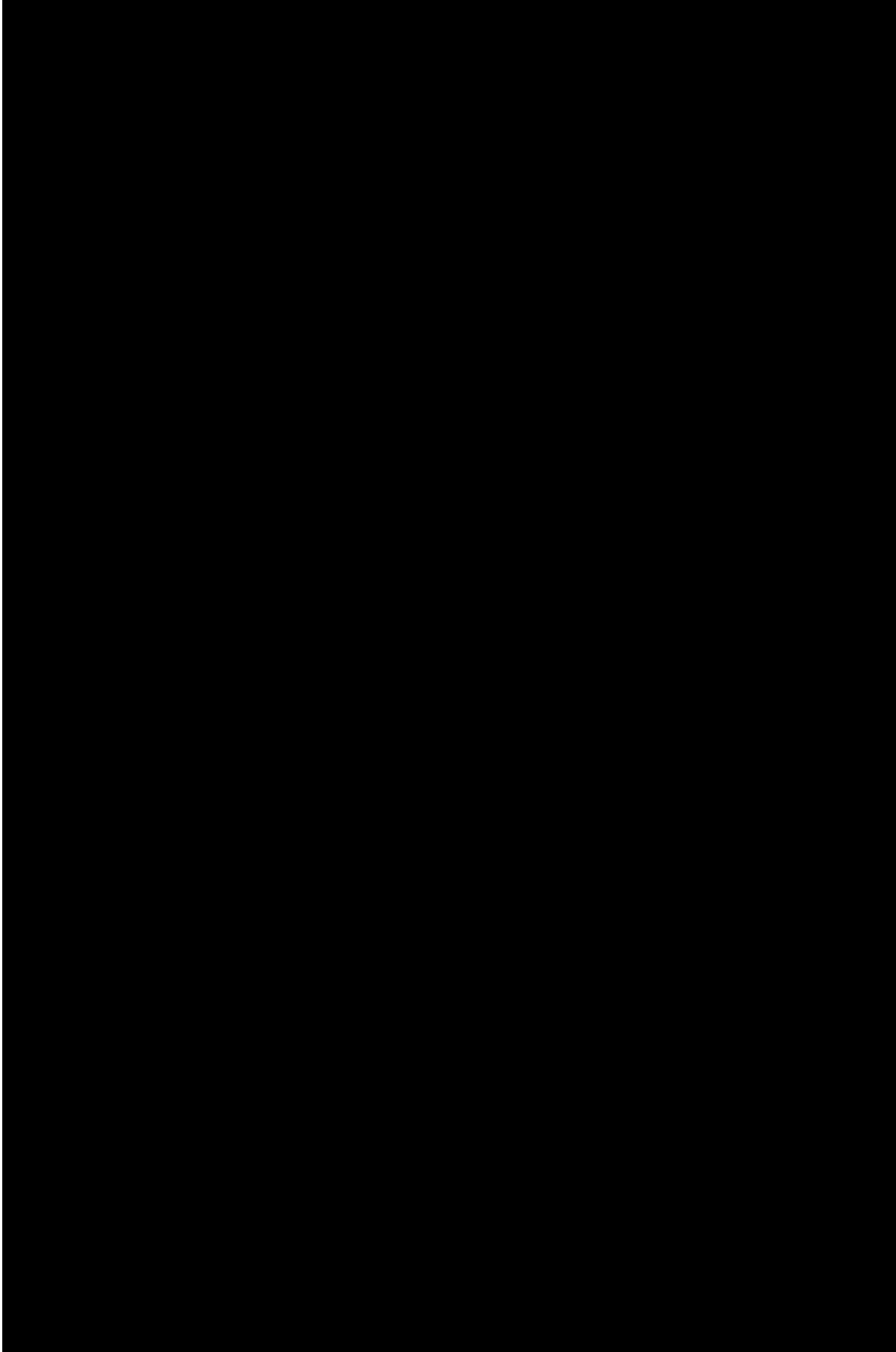
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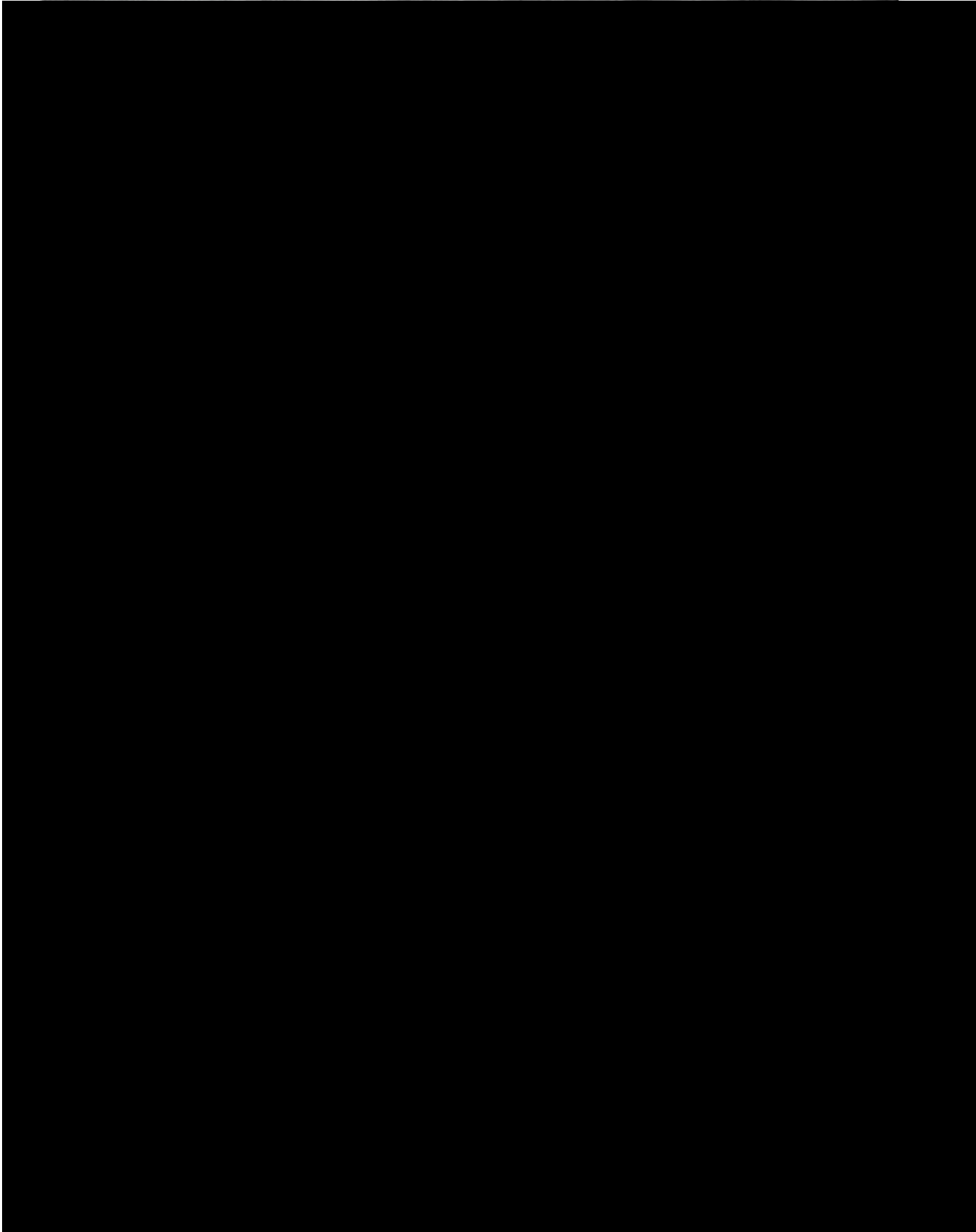
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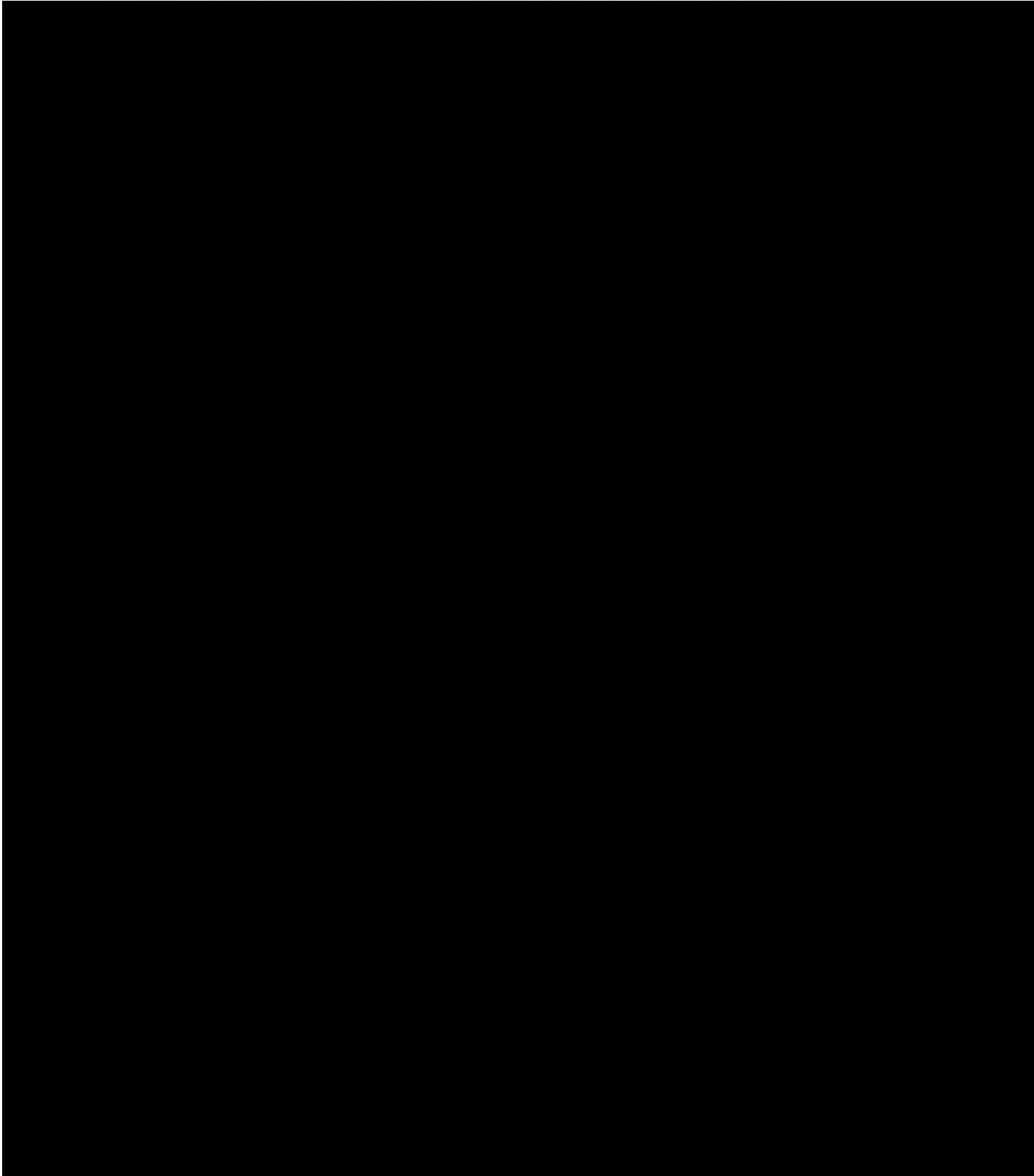
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EXHIBIT F-1
APPLICATION FOR PAYMENT

DATE: _____ CONTRACTOR: _____

REQUEST FOR PAYMENT #: _____ AGREEMENT #: _____

FOR THE MONTH ENDING: _____

MILESTONES ACHIEVED _____

ADDITIONAL DESCRIPTION: _____

I. GROSS BILLINGS:

	TOTAL THROUGH LAST PERIOD	TOTAL EARNED THIS PERIOD	TOTAL EARNED TO DATE
A: BASE AGREEMENT			
B: CHANGE ORDERS			
TOTALS:			

II. THIS PERIOD'S BILLING

A. TOTAL VALUE OF MILESTONES ACHIEVED THIS PERIOD: \$ _____

B. AGGREGATE PAYMENT AMOUNT SPECIFIED BY THIS MONTH IN EXHIBIT C:

= \$ _____ (Total Cumulative) - \$ _____ (Previously Invoiced) = \$ _____

C. SUBTOTAL (LESSER OF A OR B): \$ _____

D. SALES TAX: \$ _____

E. TOTAL DUE THIS MONTH: \$ _____

III. IDENTIFY REMOVAL, ALTERATION, OR DEMOLITION WORK PER SECTION 8.4 OF AGREEMENT: _____

IV. SUPPORTING DOCUMENTATION PER **SECTION 8.6** OF THE AGREEMENT IS ATTACHED TO THIS APPLICATION FOR PAYMENT ALL IN FORM AND SUBSTANCE SATISFACTORY TO OWNER

RESPECTFULLY SUBMITTED BY: _____

Invoices shall be prepared in one original and one copy furnished to Owner distributed as follows (or such other addresses at which Owner gives Notice to Contractor for such purpose):

Original: LG&E and KU Services Company
820 West Broadway
Louisville, KY 40202
Attn: Dianne Ware
dianne.ware@lge-ku.com

Copy: LG&E and KU Services Company
820 West Broadway
Louisville, KY 40202
Attn: Joan Lipp
joan.lipp@lge-ku.com

Handwritten initials/signatures

EXHIBIT F-2

CERTIFICATES OF: MECHANICAL COMPLETION, SUBSTANTIAL COMPLETION, COMMERCIAL OPERATION, TIE-IN OR FINAL COMPLETION

The following form shall be used for Certificates of Mechanical Completion, Substantial Completion, Commercial Operation, Tie-In or Final Completion:

CERTIFICATE OF _____
[Fill in blank with: MECHANICAL COMPLETION, SUBSTANTIAL COMPLETION, COMMERCIAL OPERATION, TIE-IN or FINAL COMPLETION, as appropriate]

This constitutes the Certificate of _____
[Fill in blank with: Mechanical Completion, Substantial Completion, Commercial Operation, Tie-In or Final Completion, as appropriate] as contemplated by the Engineering, Procurement and Construction Agreement, entered into as of the ___ day of _____ 2016 (the "Agreement"), by and between Louisville Gas and Electric Company, a Kentucky corporation ("LG&E"), Kentucky Utilities Company, a Kentucky corporation ("KU"), Indiana Municipal Power Agency, a body corporate and politic and a political subdivision of the State of Indiana ("IMPA"), and Illinois Municipal Electric Agency, a body politic and corporate, municipal corporation and unit of local government of the State of Illinois ("IMEA" and collectively with LG&E, KU and IMPA, "Owner"), and _____, a _____ corporation ("Contractor").

[The following sentence applies to Certificates of Commercial Operations, only.]
For purposes of Section _____ of the Agreement, the date on which Owner received the notice from the Contractor pursuant to which this Certificate is being issued is _____.

Executed on this _____ [date] by the Companies on behalf of the Owner.

Louisville Gas and Electric Company
By: _____
Title: _____

Kentucky Utilities Company
By: _____
Title: _____

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EXHIBIT F-3 FORM OF CHANGE ORDER

Project:	
Contractor:	
Agreement No.:	Change Order No.:
	Change Order Effective Date:
Change Order Title:	
<p>This is a Change Order to the Engineering, Procurement and Construction Agreement (“Agreement”) entered into as of the day of 20 (“Effective Date”) (and as may have been subsequently amended) by and between Louisville Gas and Electric Company, a Kentucky corporation (“LG&E”), Kentucky Utilities Company, a Kentucky corporation, (“KU”), Indiana Municipal Power Agency, a body corporate and politic and a political subdivision of the State of Indiana (“IMPA”), and Illinois Municipal Electric Agency, a body politic and corporate, municipal corporation and unit of local government of the State of Illinois (“IMEA” and collectively with LG&E, KU, and IMPA, “Owner”), and a corporation (“Contractor”). All capitalized terms not defined herein have the meaning given them in the Agreement.</p>	
In consideration of the agreements herein contained, the Parties hereto agree as follows:	
The Agreement is hereby amended as follows:	
<u>Adjustment to the Work:</u> The changes in the Work are described below and hereby incorporated in the Work and the Agreement.	<u>\$ Amount</u>
<u>Adjustment to Milestone Payment Schedule (Exhibit C of the Agreement):</u>	
<u>Adjustment to Project Schedule (Exhibit D of the Agreement):</u>	
Original Contract Price..... Total all prior Change Order amount(s) Contract Price prior to this Change Order This Change Order amount..... New Contract Price.....	
<u>Other Conditions:</u>	
To the extent stated in this Change Order, the price and time extension in this Change Order is full compensation for all costs and schedule impacts, both direct and indirect, incurred in connection with the conditions giving rise to this Change Order including all applicable markups and fees.	
This Change Order, when executed, constitutes a Modification to the Agreement, and all provisions of the Agreement, except as modified above or by a previous Change Order, shall apply hereto.	
<p style="text-align: center;"><u>Contractor:</u></p> Offered by: _____ This Change Order requires the Contractor’s signature PRIOR to acceptance and approval by LG&E/KU. Signature: _____ Name: _____ Title: _____ Date: _____	<p style="text-align: center;"><u>LG&E/KU</u></p> Requester: _____ Name: _____ Title: _____ Date: _____ Project Manager: _____ Name: _____ Title: <u>Manager, Major Capital Projects</u> Date: _____ Approver: _____ Name: _____ Title: <u>Manager, Contracts, Major Capital Projects</u> Date: _____

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EXHIBIT F-5
LIEN WAIVERS AND GENERAL RELEASE

FORM OF CONDITIONAL PARTIAL LIEN WAIVER TO BE PROVIDED BY MAJOR SUBCONTRACTORS:

LG&E and KU Trimble County CCR Treatment System (the "Project")

In accord with [insert subcontract name and paragraph(s) reference] the undersigned, for and in consideration of the payments made by _____, (the "Contractor of the Project"), to the undersigned, for labor employed in and/or equipment and materials furnished for the construction of the above-referenced Project pursuant to the above-referenced subcontract, hereby certifies as follows:

1. Upon receipt of the sum of _____, the undersigned will have received payment in full, less retainage, for labor employed in, equipment and materials furnished and/or performance of Work for the construction of the Project through the _____ day of _____, 201_ and except for receipt of said sum and as an inducement to the Contractor of the Project to make payment of the same, and except for retainage and the following matters [OUTSTANDING CLAIMS TO BE IDENTIFIED], the undersigned hereby affirms that there are no outstanding claims against the Contractor of the Project in connection with any labor employed, work done, equipment and materials furnished or performance of work by the undersigned pursuant to the above-referenced subcontract through such date.

2. Contingent upon receipt of the sum referenced in paragraph 1, the undersigned does hereby waive, release and quit claim in favor of the Contractor of the Project, any owner of the Trimble County Generation Station Site on which the Project is located, each and every party acquiring title to and interest in and/or making a loan on the Project and the title company or companies examining and/or insuring title to the Project and any and all of their successors and assignees (collectively the "Beneficiaries"), all rights that presently exist or hereafter may accrue to the undersigned to assert a lien, whether contractual, statutory or constitutional, upon the land and improvements comprising the Project which rights have arisen or shall arise out of or in connection with labor employed, equipment and materials furnished or performance of Work pursuant to the above-referenced subcontract and amendments thereto, but only for labor employed and/or equipment and materials furnished and/or work performed through the _____ day of _____, 201_.

3. The undersigned has not assigned any claim against the Contractor of the Project, or any of the other Beneficiaries, nor any lien or right to perfect a lien with respect to the Project, and the undersigned has the right, power and authority to execute this document.

4. The undersigned warrants that all laborers and subcontractors employed by it in connection with the Project, and all suppliers or materialmen from which it has acquired equipment and materials incorporated into the Project and any lien or bond claimant relating to the undersigned's work in connection with the Project have been paid all amounts due and owing through the ____ day of _____, 201_ and that none of such laborers, subcontractors, suppliers, materialmen, or claimants has any unsatisfied or unbonded lien or related claim against the Project through such date. The undersigned further warrants that, to the best of its knowledge and belief, all applicable due and outstanding taxes, fees, contributions and benefits relating directly or indirectly to the undersigned's work and which are the responsibility of the undersigned have been paid in full.

5. No security interest has been given or executed by the undersigned for or in connection with any equipment and materials, appliances, machinery, fixtures or furnishings placed upon or installed in the Project. This Affidavit and Partial Release of Liens is for the benefit of the Contractor of the Project and the Beneficiaries.

This Affidavit and Partial Release of Lien is an independent covenant and will operate and be effective with respect to Work performed, labor employed and/or equipment and materials furnished and/or performance of Work under the above-referenced subcontract and any related supplemental contract or contracts for extra or additional work on the Project performed by the undersigned through the ____ day of _____, 201_.

IN WITNESS WHEREOF, this Affidavit and Partial Release of Lien has been executed on this ____ day of _____, 201_.

WITNESS:

(Name)

Subscribed and sworn to me this ____ day of _____, 201_.

Notary Public

My Commission Expires: _____
(Notarial Seal)

Handwritten initials/signature

FORM OF CONDITIONAL PARTIAL LIEN WAIVER TO BE PROVIDED BY CONTRACTOR:

LG&E and KU Trimble County CCR Treatment System (the “Project”)

In accord with Section 8.6 of the Agreement, dated as of [_____, 201_], by and between _____ (“Contractor”) and _____ (“Owner”), the Contractor, for and in consideration of the payments to be made by the Owner to the Contractor, for Work performed, labor employed and/or for equipment furnished in connection with the construction of the Project pursuant to the above-referenced Agreement, hereby certifies as follows. Capitalized terms used and not defined herein shall have the respective meanings set forth in the Agreement:

1. In conjunction with this lien waiver, Contractor is submitting an invoice to Owner in the sum of _____ with respect to Work performed, labor employed and/or equipment and materials provided in connection with the construction of the Project for the period the _____ day of _____, 201_ through to the _____ day of _____, 201_.

2. Contingent upon receipt of the sum referenced in paragraph 1 in accordance with the Agreement, the Contractor does hereby waive, release and quit claim in favor of the Owner and the Financing Parties and any and all of their successors and assignees (collectively the “Beneficiaries”), all rights that presently exist or hereafter may accrue to the Contractor to assert a lien, whether contractual, statutory or constitutional, upon the Project and/or all or any portion of the Trimble County Generating Station Site or any improvements thereon which rights have arisen or arise out of or in connection with the performance of the Work pursuant to the Agreement, but only for Work performed, labor employed and/or equipment furnished through the _____ day of _____, 201_.

3. The Contractor has not assigned any lien or right to perfect a lien against the Project and/or all or any portion of the Trimble County Generating Station Site or any improvements thereon, and the Contractor has the right, power and authority to execute this document.

4. No security interest has been given or executed by the Contractor for or in connection with any equipment and materials, appliances, machinery, fixtures or furnishings placed upon, provided for or installed as part of the Work and/or on all or any portion of the Trimble County Generating Station Site. This Affidavit and Partial Release of Liens is for the benefit of the Beneficiaries.

This Affidavit and Partial Release of Lien is an independent covenant and will operate and be effective with respect to Work performed and labor employed and/or equipment and materials furnished under the Agreement and any related supplemental contract or contracts for extra or additional work performed by the Contractor in connection with the Project for the period the _____ day of _____, 201_ to the _____ day of _____, 201_.

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IN WITNESS WHEREOF, this Affidavit and Partial Release of Lien has been executed on this _____ day of _____, 201_.

WITNESS: _____ (Name)

Subscribed and sworn to me this _____ day of _____, 201_.

Notary Public

My Commission Expires: _____
(Notarial Seal)

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FORM OF FINAL AND FULL LIEN WAIVER TO BE PROVIDED BY MAJOR SUBCONTRACTORS:

LG&E and KU Trimble County CCR Treatment System (the “Project”)

In accord with [insert subcontract name and paragraph(s) reference] the undersigned, for and in consideration of the payments made by _____ (the “Contractor of the Project”), to the undersigned, for labor employed in and/or equipment and materials furnished for the construction of the above-referenced Project pursuant to the above-referenced subcontract, hereby certifies as follows:

1. Upon receipt of the sum of _____, the undersigned will have received final payment in full for all labor employed in and/or equipment and materials furnished and/or performance of Work in connection with the construction of the Project, and except for receipt of said sum and as an inducement to the Contractor of the Project to make payment of the same, and, except for the following matters [OUTSTANDING CLAIMS TO BE IDENTIFIED], the undersigned hereby affirms that there are no outstanding claims against the Contractor of the Project in connection with the Project in connection with any labor employed, equipment and materials furnished and/or performance of Work by the undersigned pursuant to the above-referenced subcontract.

2. In consideration of the payments made to date and upon receipt of the sum of _____, the undersigned does hereby waive, release and quit claim in favor of the Contractor of the Project, any owner of the site on which the Project is located, each and every party acquiring title to and interest in and/or making a loan on the Project and the title company or companies examining and/or insuring title to the Project and any and all of their successors and assignees (collectively, the “Beneficiaries”), all rights that presently exist or hereafter may accrue to the undersigned to assert a lien, whether contractual, statutory or constitutional, upon the land and improvements comprising the Project which rights have arisen or shall arise out of or in connection with labor employed, equipment and materials furnished and/or performance of Work pursuant to the above-referenced subcontract and amendments thereto.

3. Contingent upon the receipt of the sum of _____, and except with respect to claims identified in paragraph 1 above, the undersigned does hereby forever release, waive, and discharge the Contractor of the Project, the Project, the Owner of the Project and the other Beneficiaries from any and all causes of action, suits, debts, accounts, damages, encumbrances, judgments, claims, and demands whatsoever, in law or equity which the undersigned and/or its successors and/or assignees ever had, or ever will have against any of them by reason of labor employed in, equipment and materials furnished and/or the performance of Work relating to the construction of the Project; and the undersigned hereby agrees to indemnify and hold the above parties harmless from any and all damages, costs expenses, demands, suits, and legal fees, directly or indirectly relating to any of the foregoing claims or liens.

4. The undersigned has not and will not assign any claim against the Contractor of the Project, or any of the Beneficiaries, nor any lien or right to perfect a lien against the Project, and the undersigned has the right, power, and authority to execute this Affidavit, Waiver and Release.

5. The undersigned warrants that all laborers and subcontractors employed by it, and all suppliers or materialmen from which it has acquired equipment or materials incorporated into the Project and any lien or bond claimant relating to the undersigned's Work have been paid all amounts due and owing through the date hereof and that none of such laborers, subcontractors, suppliers, materialmen, or claimants has any claim, demand, or lien against the Project through the date hereof. The undersigned further warrants, to the best of its knowledge and belief that all due and outstanding applicable taxes, fees, contributions and benefits relating directly or indirectly to the undersigned's Work and which are the responsibility of the undersigned have been paid in full.

6. No security interest has been given or executed by the undersigned for or in connection with any equipment, materials, appliances, machinery, fixtures, or furnishings placed upon or installed in the Project.

This Affidavit, Waiver of Lien and Release shall be an independent covenant and shall operate and be effective with respect to labor employed, equipment and materials furnished and/or performance of Work under the above-referenced subcontract and any related supplemental contract or contracts for extra or additional Work on the Project performed by the undersigned. This Affidavit of Waiver and Release is for the benefit of the Contractor of the Project and the Beneficiaries.

IN WITNESS WHEREOF, this Affidavit, Waiver of Lien and Release has been executed on this _____ day of _____, 201_.

WITNESS:

(Name of Company)

Subscribed, sworn to, and acknowledged before me this _____ day of ____, 201_

Notary Public

My Commission Expires: _____
(Notarial Seal)

ylc *BF*

FORM OF FINAL AND FULL LIEN WAIVER TO BE PROVIDED BY CONTRACTOR:

LG&E and KU Trimble County CCR Treatment System (the "Project")

In accord with Section 8.6 of the Agreement, dated as of [_____], 201_], by and between _____ ("Contractor") and _____ ("Owner") the Contractor, for and in consideration of the payments made by the Owner to the Contractor for Work performed, labor employed in and/or equipment furnished for the construction of the Project pursuant to the above-referenced Agreement, hereby certifies as follows. Capitalized terms used and not defined herein shall have the respective meanings as set forth in the Agreement:

1. Upon receipt of the sum of _____, the Contractor will have received final payment in full for all Work performed, labor employed in and/or equipment furnished in the construction of the Project, and except for receipt of said final payment and [OUTSTANDING CONTRACTOR CLAIMS TO BE IDENTIFIED], and as an inducement to the Owner to make such final payment, the Contractor hereby affirms that there are no other outstanding claims against the Owner in connection with the Project. The above excludes claims for unreimbursed Sales Taxes for which the Contractor is entitled to be reimbursed under the Agreement and amounts for which the Contractor is entitled to indemnity under the Agreement, in each case to the extent not known by Contractor on the date of this Affidavit.

2. In consideration of the payments made to date and upon receipt of the sum of _____, the Contractor does hereby waive, release and quit claim in favor of the Owner and the Financing Parties and any and all of their successors and assignees (collectively, the "Beneficiaries"), all rights that presently exist or hereafter may accrue to the Contractor to assert a lien, whether contractual, statutory or constitutional, upon the Project and/or all or any portion of the Trimble County Generating Station Site or improvements thereon, which rights have arisen or arise out of or in connection with the performance of the Work pursuant to the Agreement.

3. Contingent upon the receipt of the sum of _____, and except with respect to claims identified or referenced in paragraph 1 above, the Contractor does hereby forever release, waive, and discharge the Beneficiaries from any and all causes of action, suits, debts, accounts, damages, encumbrances, judgments, claims, and demands whatsoever, in law or equity which the Contractor and/or its successors and/or assignees ever had or ever will have against any of them by reason of non-payment for Work performed, labor employed in and/or Equipment furnished relating to the construction of the Project; and, in accordance with and subject to the terms of the Agreement, the Contractor hereby agrees to indemnify and hold the above parties harmless from any and all damages, costs expenses, demands, suits, and legal fees, directly or indirectly relating to any of the foregoing claims or liens.

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4. The Contractor has not and will not assign any claim against the Beneficiaries, nor any lien or right to perfect a lien against the Project and/or all or any portion of the Trimble County Generating Station Site or improvements thereon, and the Contractor has the right, power, and authority to execute this Affidavit, Waiver and Release.

5. The Contractor warrants that all laborers and sub suppliers employed by it, and all suppliers or materialmen from which it has acquired equipment incorporated into the Trimble County Generating Station Site and any lien or bond claimant relating to the Contractor’s work have been paid all amounts due and owing through the date hereof and that none of such laborers, subcontractors, suppliers, materialmen, or claimants has any unsatisfied or un-bonded lien against the Project and/or all or any portion of the Trimble County Generating Station Site or improvements thereon, through the date hereof. The Contractor further warrants that all due and outstanding applicable taxes, fees, contributions and benefits relating directly or indirectly to the Contractor’s Work and which are the responsibility of the Contractor under the Agreement have been paid in full.

6. No security interest has been given or executed by the Contractor for or in connection with any materials, equipment, appliances, machinery, fixtures, or furnishings placed upon or installed in Projects and/or all or any portion of the Trimble County Generating Station Site or improvements thereon.

This Affidavit, Waiver of Lien and Release shall be an independent covenant and shall operate and be effective with respect to Work performed, labor employed and/or equipment furnished under the Agreement and any related supplemental contract or contracts for extra or additional work performed by the Contractor in connection with the Project. This Affidavit of Waiver and Release is for the benefit of the Beneficiaries.

IN WITNESS WHEREOF, this Affidavit, Waiver of Lien and Release has been executed on this ____ day of _____, 201_.

WITNESS: (Name of Company)

Subscribed, sworn to, and acknowledged before me this ____ day of _____, 201_.

Notary Public

My Commission Expires: _____
(Notarial Seal)

EXHIBIT F-7
STATION FORMS

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- 6. MOBILE CRANE POWER LINE CLEARANCE WORKSHEET**

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LG&E and KU Energy LLC
Thermal Hot Work Permit Program

Authored By: _____

Jeffery O. Gilbert, CIH

Approved By:

Manager, Corporate Health & Safety _____

Barbara Hawkins, RN

Date: _____

Effective Date: December 22, 2011

Next review to be completed by: December 22, 2014

(signed copy on file in Corporate Health & Safety office)

Handwritten initials: JEG and BS

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THERMAL HOT WORK PERMIT PROGRAM

a) PURPOSE

The purpose of this program is to reduce or eliminate the potential for injury to people and damage to property that can result from fires or explosions that arise when thermal hot work is performed outside of a designated safe thermal hot work area.

This program establishes a permit authorization system to ensure that all hazards are evaluated and that appropriate safety measures and controls are taken prior to and during any operation involving open-flames or that produces heat and/or sparks.

This operating procedure is written in accordance with the Occupational Safety and Health Administration's (OSHA) workplace standard, 29 CFR 1910.252, Welding, Cutting and Brazing and the National Fire Protection Association (NFPA) code standard 51B, Fire Prevention in Use of Cutting and Welding Processes.

b) SCOPE

This program is applicable to all LGE/KU personnel and all contract personnel working at LGE/KU-owned properties and other locations where LGE/KU has control over the work to be performed.

3. Responsibility

All employees have responsibility for ensuring compliance with this program, including suspending thermal hot work if conditions become unsafe. Specific responsibilities are:

- 1) The Corporate Health and Safety Manager shall ensure that:
 - a) the written Corporate Thermal Hot Work Permit Program is reviewed and revised, as necessary,
 - b) the Business Units are provided assistance in evaluating the applicability and implementation of this program, and
 - c) reviews of the program's effectiveness are conducted and documented.
- 2) Business Unit managers shall:
 - a) designate one or more individuals with responsibility for authorizing thermal hot work in areas not specifically designed for such processes,
 - b) provide resources and enforcement toward the identification, implementation and evaluation of controls to protect workers potentially exposed to the hazards of thermal hot work in the workplace,

- c) provide necessary support to ensure documentation of required record keeping activities, and
 - d) provide necessary supports to ensure employees attend annual training classes.
- 3) Health and Safety Specialists and Technical Training Consultants are responsible for:
- a) reviewing and approving, in coordination with departmental representatives, the locations where thermal hot work permits are required. This can be accomplished by either designating areas where permits are required or identifying areas where permits would, under normal conditions not be required,
 - b) maintaining a list of areas that are specifically designed for thermal hot work.
- 4) Supervisor and/or Team Leader are responsible for:
- a) ensuring that fire watches are properly trained,
 - b) ensuring that the proper firefighting equipment is in working condition, and is available to standby personnel,
 - c) determining whether combustible materials or other hazards are present or are likely to be present in the work location,
 - d) periodically monitoring designated areas to be sure that conditions have not become unsafe for thermal hot work,
 - e) preparing the workplace by:
 - i) moving the work to a designated safe thermal hot work area or a location free of combustibles and potentially explosive atmospheres, or
 - ii) if the work cannot be moved, having the combustibles moved to a safe distance (a minimum of 35 feet) from the work area, or
 - iii) having the combustibles properly protected against ignition, or
 - iv) ventilating the area to remove potentially combustible or explosive gases or dusts (**Note:** In areas where there is the possibility of a release of an explosive gas, continuous monitoring of the area with an explosive meter is required.), or

- v) scheduling the thermal hot work during a time when combustible materials are not to be in the area.
 - f) obtaining a thermal hot work permit from an issuing authority for any work that is to be performed outside of a designated safe thermal hot work area,
 - g) ensuring that workers are provided with and use proper safety equipment, including personal protective equipment and fire extinguishing equipment,
 - h) when required, designating a properly trained person to serve as a fire watch.
- 5) The Contractor Proponent will be responsible for ensuring that the duties of the Supervisors and/or Team Leaders are properly executed for tasks involving contractors performing thermal hot work.
- 6) The Issuing Authority shall:
- a) review the permit request and verify that all necessary precautions have been properly taken. If necessary, a visual inspection may be conducted prior to final approval.
 - b) verify that the buildings fire sprinkler system is in service, where applicable. Determine if the work area has any fire alarm detectors that need to be disabled to prevent false alarms, and appropriately disable only those devices that could be accidentally activated.
 - c) verify the location, start time and duration of the thermal hot work operation. A thermal hot work permit shall only be valid for the time duration identified. No thermal hot work permit shall exceed the requestor's scheduled shift period unless the requester receives a written approval from the Issuing Authority for an extension.
 - d) determine whether a fire watch is required for the thermal hot work operation.
- 7) The Fire Watch shall be a properly trained person designated by the individual or department requesting the thermal hot work permit, but shall not be the actual employee who is performing the thermal hot work operation.

Specific responsibilities include:

- a) having fire extinguishing equipment readily available and be trained in its proper use and limitations.
- b) being familiar with facilities and procedures for sounding an alarm in the event of a fire.

- c) correcting or stopping any conditions which may lead to a fire and reporting conditions to their department at the earliest opportunity. Attempting to extinguish fires appropriate to the available equipment and level of training, or otherwise activate the fire alarm system.
 - d) remain at the work site to monitor for smoldering fires while work is in progress and for at least one half hour following job completion. If the fire watch must leave the work site, all thermal hot work must stop.
- 8) Employees performing thermal hot work shall obtain proper authorization to perform thermal hot work operations via the THERMAL HOT WORK PERMIT and shall handle the equipment safely and use it so as not to endanger lives and property. The employee performing thermal hot work is also responsible for:
- a) ensuring full compliance with the requirements of this procedure.
 - b) being fully qualified to perform required thermal hot work and verify that their equipment and tools are in good working order.
 - c) using appropriate safety equipment, including eye and face protection, hand protection, body protection, head protection, hearing protection and respiratory protection, as needed.
 - d) avoiding thermal hot work operations where conditions ARE NOT SAFE.
 - e) stopping work when conditions change from those set when the work was approved. If the designated fire watch must leave the work site, operations shall cease and the operator shall remain at the work site for at least one half hour following job completion to monitor for fires.

4. Definitions

Designated Safe Thermal Hot Work Areas are areas that have been designed and constructed for performing work involving open-flames or that produce heat or sparks.

Facility Manager is the senior manager responsible for the physical operations of the facility or his/her designee (i.e., a plant manager at a power generation station or a service center manager at an operations center).

Fire Watch is a person trained to monitor thermal hot work operations. The Fire Watch shall be present during the entire thermal hot work operation and are immediately available to extinguish a fire or take other effective action if needed.

Thermal Hot Work is any work using an open-flame, heat or spark-producing apparatus. Thermal hot work includes, but is not limited to, welding, cutting, burning, grinding, and any related heat-producing jobs that could ignite combustible materials or

flammable atmospheres. **Note:** Bolt heaters, car thaw sheds, portable room heaters (where allowed) and thermal weatherization equipment are not considered thermal hot work and do not require permits under this corporate program.

Thermal Hot Work Permit is a special permit, issued by an issuing authority, which authorizes specified thermal hot work at a specific location and time.

Issuing Authority is a person trained and approved by the facility manager or Business Unit manager to issue thermal hot work permits.

5. Thermal Hot Work Requirements

- 1) Routine thermal hot work operations shall be allowed without the requirement of a permit only in areas that have been designated as a SAFE THERMAL HOT WORK AREA.
- 2) In areas where it is not practical to move the work to a designated SAFE THERMAL HOT WORK AREA, thermal hot work shall only be permitted once the area is made fire safe by removing combustibles or protecting combustibles from ignition sources.
- 3) Thermal hot work operations are strictly prohibited under the following conditions:
 - a) in areas not designated as SAFE THERMAL HOT WORK AREAS where a proper thermal hot work permit has not been obtained;
 - b) in sprinklered buildings while such protection is impaired;
 - c) in the presence of explosive atmospheres, such as mixtures of flammable gases, vapors, liquids, or dusts with air; on or in any drum, container or vessel that has not been properly cleaned to remove any possible explosive atmospheres that can develop inside from residual contents; or
 - d) in areas near the storage of large quantities of flammable or combustible materials that can readily ignite. Note: In coal yards and other coal storage areas, as well as when working on or within 35 feet of coal handling equipment, a thermal hot work permit will always be required and the coal must be adequately protected.

6. Thermal Hot Work Permit Procedures

- 1) Before a thermal hot work permit is approved and issued, the department or individual requesting the permit shall verify that:

- a) all thermal hot work equipment to be used is in satisfactory condition and in good repair.
 - b) any combustible materials such as paper, wood, textiles, or coal on the floor are swept clear for a radius of 35 feet or protected against ignition by other means. Floors constructed of combustible materials are properly protected by either wetting the surface or covered by fire-resistant shields. Where floors have been wetted down, personnel operating arc welding or cutting equipment shall be protected from possible shock.
 - c) all combustible materials are relocated at least 35 feet from the work area. Where relocation is not practical, the combustible materials shall be adequately protected.
 - d) openings or cracks in walls, floors, or ducts and grating surfaces within 35 feet of the work area are tightly covered to prevent the passage of sparks to adjacent areas. Where thermal hot work is done near walls, partitions, ceilings or roofs of combustible construction, fire-resistant shields or guards are provided to prevent ignition.
 - e) if thermal hot work is to be done on a metal wall, partition, ceiling or roof, that precautions are taken to prevent ignition of combustible materials on the other side, due to conduction or radiation, such as relocation or covering the materials. If the combustible materials cannot be relocated or protected, a fire watch shall be provided on the opposite side of the wall where the work is being performed.
 - f) no thermal hot work is attempted on a metal partition, wall ceiling or roof having a covering, or on walls or partitions of combustible sandwich-type panel construction.
 - g) thermal hot work is not undertaken on pipes or other metals that are in contact with combustible walls, partitions, ceilings or roofs, if the work is close enough to cause ignition by conduction.
 - h) nearby personnel are suitably protected against heat, sparks, slag, etc.
 - i) where thermal hot work is to be done in close proximity to a sprinkler head, that the head is covered by a wet cloth to prevent activation. The cloth must be removed immediately at the conclusion of the thermal hot work.
- 2) The department or individual requesting the thermal hot work permit is responsible for designating a fire watch. The fire watch shall:
- a) have fire extinguishing equipment readily available and be trained in its use.

- b) know how to activate the building's fire alarm system, if applicable, or who to notify in the event of a fire.
 - c) watch for fires in all exposed areas, and try to extinguish them first only when obviously within the capacity of the equipment available, or otherwise sound the alarm immediately.
 - d) monitor the work area for at least one half hour after completion of the thermal hot work to detect and extinguish any smoldering fires that may be identified.
- 3) Once the work area has been properly prepared, the department or individual requesting the thermal hot work permit shall complete the thermal hot work permit form (See *Appendix A* for an example of a thermal hot work permit, the Business Units may create their own form) and request final review and approval from an Issuing Authority. The requestor, Issuing Authority, Fire Watch (when required) and employees performing the thermal hot work shall sign and dated the permit. Once approved, the thermal hot work permit shall be posted in the area where the work is to be performed.

7. Special Precautions

- 1) When work is stopped for an extended period of time the equipment must be shut down and secured to prevent accidental release of sparks, heat or flames. If the work stoppage will exceed the original duration time of the thermal hot work permit, the requester must notify Issuing Authority to have the permit extended or to request issuance of a new permit.
- 2) When thermal hot work is to be performed in a permit-required confined space or in conjunction with other permits or tags (such as required by the Lockout/Tagout Program), all of the permits shall be marked so that they are linked to the original work order and to each other.
- 3) When the operation of equipment would render the area unsafe for thermal hot work, this equipment must be locked and/or tagged out in accordance with the Lockout – Tagout Program. Both the lockout – tag out documentation and the thermal hot work permit shall be marked so that they are linked to the original work order and to each other.
- 4) Drums, tanks, containers or any vessel that may have contained chemicals or materials that when heated may produce flammable, explosive or toxic atmospheres shall be thoroughly cleaned and prepared prior to performing any thermal hot work on them.

- 5) Thermal hot work that must be performed on any utility piping used for the transmission or distribution of flammable gases or liquids shall only be performed by a crew qualified to make hot taps.

- 6) Contractors shall perform all thermal hot work procedures in accordance with this operating procedure or be able to demonstrate that they have a comparable procedure that meets or exceeds the requirements of this operating procedure.

8. Personal Protective Equipment

Personal protective equipment for eyes, face, head, and extremities, respiratory protection and protective shields and barriers, shall be used and maintained in a sanitary and reliable condition. Selection of appropriate devices should be made in accordance with the Personal Protective Equipment Hazard Assessment Program.

Appendix A: Thermal Hot Work Permit Example

nyc *BE*

TRIMBLE COUNTY PLANT HOT WORK PERMIT

Person requesting permit: _____ Date of Request: _____
 LG&E Work Order #: _____ or Contractor: _____
 Location and System to be worked on: _____
 Duration of Permit: Date/Time _____ through Date/Time _____
 Nature of Work (be specific): _____
 The requester and authorizing person shall check the following items and resolve any issues prior to issuing the permit.

YES	NO	N/A	DESCRIPTION
			General condition of area housekeeping acceptable.
			Necessary equipment tagged/locked out of service according to LG&E Lockout/Tagout program.
			Fire protection system in service, including extinguishers.
			Remove all flammable and combustible materials. Use guards or shields to protect immovable fire hazards. Remove or cover flammable and combustible liquid storage cabinets and containers.
			Sweep or vacuum any dust in 35-foot radius area.
			Check area for combustible vapors.
			Purge or inert any piping or vessels prior to welding, cutting or heating if they contain combustible or flammable fluids.
			Opening in floors or walls shall be covered to contain sparks and hot slag.
			Fire watch provided and equipped with a fire extinguisher and the location of nearest firefighting equipment identified.
			Fire watch instructed to remain in area for a period of 30 minutes after the work is complete.
			If working in a confined space, during lunch and overnight, remove electrodes from holders and locate so that accidental contact cannot occur and disconnect machine from power source.
			If working in a confined space, close torch valves and shut off gas supply to torch outside confined area.
			Work area barricaded if necessary.
			Communication system operating.
			Required Personal Protective Equipment in use.
			Notification of appropriate supervisor and operations personnel.

 Signature of person requesting permit

 Signature of authorizing person

 Print Name

 Date

 Print Name

 Date

Handwritten signature and initials

Trimble County
HOT WORK PERMIT
Procedure

- Identify the need for a Hot Work Permit:
- Does the work area contain or have the potential to contain combustible dusts, gases, fumes, vapors, etc.?

And

Does the work provide a potential ignition source such as: welding, burning, grinding, or air arc cutting, gouging, etc.?

Then:

- Fill out top section of permit
- Complete checklist
- Post permit at job site
- When job is completed, conduct fire watch or assign this to someone
- Turn completed permit in to supervisor
- Supervisor forwards permit to Safety Specialist



REQUEST FOR LOCATION OF UNDERGROUND FACILITIES

LOCATION: TC DATE REQUESTED: _____

Description of Work to Be Done and Specific Area Involved:

DATE WORK TO START: _____

DATE WORK TO FINISH: _____

PERSON REQUESTING LOCATION: _____

LOCATION CHECKED BY AND DATE: _____

SPECIFIC INSTRUCTIONS (HOW CLOSE TO DIG BY MACHINE/HAND);
NOTE AREAS ON DRAWING:

Ref. Drawings supplied – _____

This document to be kept at digging site at **ALL** times. _____

DATE PERMISSION GIVEN TO DIG: _____

PERSON NOTIFIED IF DIFFERENT THAN PERSON REQUESTING CHECK: _____

Handwritten signature/initials: wj e bc

LG&E KU Power Production

Lockout / Tagout Written Policy

mje

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LG&E KU Power Production
Lockout/Tagout Written Policy

Introduction

This policy is drawn from the combination of KOSHA 1910.269, KOSHA 1910.147, and Federal OSHA 1917, 1918, & 1919 in regard to LOCKOUT/TAGOUT (LOTO) requirements. Elements of all these standards apply to specific areas, equipment, and NORMAL PRODUCTION OPERATIONS at one or more of our LG&E KU Power Production facilities. For operational control and Lockout/Tagout authority for Transmission/Distribution systems, refer to “Operational Control and Lockout/Tagout Authority at Generating Stations”, Appendix A.

Operating conditions, maintenance and construction activities require periodic isolation of electric and mechanical equipment from hazardous energy sources. Hazardous energy may include, but is not limited to, voltage, current, pressure and temperature. Hazardous energy isolation shall be applied to provide for personnel safety, protection of equipment and/or when operating conditions require it. These LOCKOUT/TAGOUT (LOTO) Procedures have been implemented to ensure the safety of personnel and equipment during these activities.

nyk *BS*

DEFINITIONS:

ADMINISTRATIVE AUTHORITY (AA) is the individual who shall ENSURE proper ENERGY SOURCE isolation consistent with the requirements of these LOTO PROCEDURES. The following shall be recognized as designated AA.

KU

- Shift Supervisors
- Designated Unit Operators
- Coal Yard Supervisors and Assistant CY Supervisors
- Designated Combustion Turbine (CT) Site personnel for CT's and Ice plant
- Others designated in special circumstances as outlined in these procedures

LGE

- Production Leaders
- Designated Operators
- Fuels Leaders and designated Material Handling Operators
- Turbine Operators at Ohio Falls
- Lab Leaders and designated Lab Technicians
- Others designated in special circumstances as outlined in these procedures

AFFECTED PERSON is an employee or contractor whose job requires him/her to operate or use a machine or equipment on which servicing or maintenance is being performed under lockout or tagout, or whose job requires him/her to work in an area in which such servicing or maintenance is being performed.

AUTHORIZED PERSON is a QUALIFIED employee or contractor who locks out or tags out equipment or performs maintenance on that equipment. An AFFECTED PERSON becomes an AUTHORIZED PERSON when that person's duties include performing maintenance or LOTO of said equipment.

CERTIFIED refers to an employee who has been trained and demonstrated proficiency in performing the required LOTO PROCEDURES.

CLEARANCE pertains to the holding of a section of line or piece of equipment out of service for each individual so that work may be safely performed. CLEARANCE may only be issued by an AA after:

1. The appropriate ENERGY SOURCE ISOLATION has been applied to the line or piece of equipment by an AUTHORIZED PERSON, and
2. The requester has checked to see that a Hold Card has been applied to the appropriate ENERGY SOURCE and verified that the equipment is properly isolated and

3. The requester has checked the CERTIFICATE NUMBER at the top of the Hold Card against the CERTIFICATE NUMBER at the top of the MTCM, and
4. Signed in the "CLEARANCE requested and checked by" column of the MTCM.

CERTIFICATE NUMBER is the number that formally relates each Hold Card to its own MTCM sheet.

DE-ENERGIZED means free from any electrical connection to a source of potential difference and from electric charge. (Free from any and all forms of hazardous energy.)

ENERGIZED means connected to an electrical source or containing residual or stored energy.

ENERGY ISOLATING DEVICE means a physical device that prevents the transmission or release of hazardous energy including, but not limited to, the following: a manually operated electrical circuit breaker, a disconnect switch, a slide gate, a slip blind, a line valve, blocks, and similar devices with a visible indication of the position of the device. (Push buttons, selector switches, and other control circuit type devices are not considered energy isolating devices.)

ENERGY ISOLATING PROCEDURES are procedures that set forth the specific procedural steps for shutting down, isolating, blocking and securing machines or equipment to control ENERGY SOURCES.

ENERGY SAFE POSITION means the position of an isolation device in which no possible re-accumulation of energy can occur.

ENERGY SOURCE is any electrical, mechanical, hydraulic, pneumatic, chemical, thermal, or other energy sources that could cause injury to personnel.

ENSURE means to be responsible for the completion of an action or a task. A person who ENSURES that something is done guarantees that the action or task will be performed, whether they personally perform the task or assign it to someone else.

EXCLUSIVE CONTROL is when the employee has physical possession of the plug, or the plug is in arm's reach and in line of sight of the employee, or if the employee has affixed their personal lockout device on the plug.

GENERATION EQUIPMENT is all equipment used to generate power except those specifically identified as NON-GENERATION EQUIPMENT.

LOCKOUT/TAGOUT (LOTO) is the placement of a lock or Hold Card on the ENERGY ISOLATING DEVICE in accordance with an established procedure, indicating that the ENERGY ISOLATING DEVICE shall not be operated until removal of the lock or Hold Card in accordance with the established procedure. The terms "lockout" and "tagout" are interchangeable and allows the use of a lock or tag or a combination of both.

LOCKOUT/TAGOUT PROCEDURES are specific procedural steps for the placement, removal and transfer of locks or Hold Cards and the responsibilities for them.

MASTER TAG CONTROL MECHANISM (MTCM) is the sheet maintained and controlled by the AA. It is the formal control that links all personnel holding CLEARANCE on a piece of equipment to the single Hold Card on the prescribed ENERGY ISOLATING DEVICE.

NON-GENERATION EQUIPMENT includes, but is not limited to:

- Elevator
- Lighting
- Heating
- Ventilation
- Air Conditioning Equipment
- Receptacle Feeds
- Fire Protection Equipment

NORMAL PRODUCTION OPERATIONS means the utilization of a machine or equipment to perform its intended production function.

PERIODIC INSPECTIONS are inspections conducted and documented for the purpose of identifying employee compliance with the LOTO requirements and must be conducted annually as described in *Training and Competencies* within this LOTO procedure and Appendix C.

PERSON IN CHARGE is an AUTHORIZED PERSON designated to be supervising and responsible for a work group.

QUALIFIED PERSON refers to a person knowledgeable in the construction or operation of electric power generation, transmission, or distribution equipment and the hazards involved.

REMOTE SITES are facilities designated by Management as remote for the purposes of LOTO.

RESIDENT CONTRACTOR is an employee of a contract firm that normally reports to the generating station on a routine basis (non-project / non-outage).

SAFETY TAGGING SYSTEM (STS) is a computer system utilized to record and track LOTO activities at our generating stations.

SUBSHEET is a document maintained by the contractor or crew leader for those AUTHORIZED PERSONS who are assigned CLEARANCE under their direct responsibility.

SWITCH is a device for opening and closing or for changing the flow of energy to a piece of equipment. A switch is understood to be either manually operable or a computer screen graphic symbol.

Scope and Responsibility

This Lockout/Tagout policy is applicable to all personnel at LG&E KU Power Production sites where the potential release of energy from any form of ENERGY SOURCE could cause injury to personnel, damage to equipment or where employees must perform any type of ENERGY ISOLATION PROCEDURE.

Management is responsible for:

- a) Providing resources necessary for the implementation of the policy.
- b) Providing necessary support to ENSURE employees are trained and QUALIFIED as required.
- c) ENSURING compliance with each element of the written program and training requirements.

Supervisors/Leaders/Chiefs/Engineers/Planners/Contract Coordinators/Project Coordinators/Contract Proponents and others as assigned are responsible to ENSURE that:

- a) AUTHORIZED and AFFECTED PERSONS have been trained, QUALIFIED and/or CERTIFIED per the requirements of this written policy and associated ENERGY ISOLATION PROCEDURES.
- b) AUTHORIZED and AFFECTED PERSONS conduct their work in accordance with this written policy and ENERGY ISOLATION PROCEDURES.
- c) PERIODIC INSPECTIONS are conducted, identifying employee compliance with the LOTO policy and ENSURING subsequent retraining is completed and documented.
- d) A copy of the LG&E KU Power Production LOTO PROCEDURES (i.e. this document) is provided to contractors under their direction.

Health & Safety personnel are responsible for:

- a) Assisting management in ENSURING compliance with the written policy.
- b) Observing work activities, maintaining PERIODIC INSPECTION records, identifying employee compliance with the LOTO program and ENSURING that subsequent retraining is completed and documented.
- c) Conducting audits to determine level of overall program compliance.
- d) Working with Management to identify any changes to the procedures that would enhance the safety of all personnel within the constraints of the applicable standards.
- e) Coordinating LOTO training for all station personnel.

AUTHORIZED and AFFECTED PERSONS are responsible for:

- a) ENSURING compliance with this program.
- b) ENSURING they are knowledgeable of the specific hazards to which they are exposed.

Description of Operating Cards and MTCM

A. Hold Card

1) Physical Characteristics:

- a) This is a red card bearing the word "HOLD" in bold black letters across the back of the card. The words "DANGER DO NOT OPERATE" are printed across the front top of the card. The Hold Card shall also include provisions for the following:
 - Each Hold Card shall have its own unique CERTIFICATE NUMBER
 - Equipment Name
 - Name of individual performing CLEARANCE
 - Date and Time equipment cleared
- b) Hold Cards shall be capable of withstanding the environment to which they are exposed for the maximum period of time that exposure is expected.
- c) Hold Card attachment means shall be of a non-reusable, self-locking, and non-releasable type with a minimum unlocking strength of no less than 50 pounds.

Notes:

Hold Card attachment on push buttons, selector switches, and other control-circuit-type devices are exempt from the before mentioned minimum lock and strength requirements.

Push buttons, selector switches, and other control-circuit-type devices are not considered to be energy isolating devices and shall not be used as the main source of isolation. Although, they are included as part of the energy isolating process for LOTO.

2) Use:

- a) The Hold Card is the formal registered card in the Lockout/Tagout Program.
- b) Hold Cards shall be used for all CLEARANCES of ENERGY SOURCES.
- c) The Hold Card shall have a unique Certificate Number which matches its related MTCM.
- d) Hold Cards are placed only at the direction of the ADMINISTRATIVE AUTHORITY (AA).
- e) Hold Cards shall be applied to the ENERGY ISOLATING DEVICE.
- f) Equipment shall be carded in the ENERGY SAFE POSITION **only**. Additional safety measures such as, but not limited to, securing a valve in the ENERGY SAFE POSITION, blocking of a control switch, opening of an extra disconnecting device, removal of an isolating circuit element or removal of the valve handle shall be used to reduce the likelihood of inadvertent energizing.

3) Registration:

- a) For GENERATION EQUIPMENT: Hold Cards and MASTER TAG CONTROL MECHANISM (MTCM) shall be required for all CLEARANCES.

- b) For NON-GENERATION EQUIPMENT: Locks (where they can be installed), Hold Cards and MTCMs shall be required for all CLEARANCES. Locks shall be identified as in Appendix F.
- c) All Hold Cards shall be registered in the STS or approved log book.
- d) Hold Cards shall have a unique CERTIFICATE NUMBER printed on the top of the card. This number is specific and is generated by the STS. This number must also be printed in the CERTIFICATE NUMBER section of the MTCM.

4) Authority:

- a) Hold Cards with MTCMs have absolute CLEARANCE authority. A device having a Hold Card attached shall **never** be operated.
- b) The Hold Card provides CLEARANCE authority for safety to personnel and/or equipment.
- c) All registered Hold Cards carry equal CLEARANCE authority.

B. Caution Card

1) Physical Characteristics:

- The caution card is yellow in color with the word "CAUTION" printed across the top. Ruled horizontal lines are provided where information such as which station, what equipment, who put the card on, the date and the reason for the card can be written.

2) Use:

- a) The caution card provides information relating to an unusual condition associated with the operation of the device or system.
- b) The caution card shall only be placed or removed with the approval of a Supervisor/Leader/Chief as deemed prudent and necessary. The card shall remain in force until such time as the unusual condition has been corrected or returned to its normal status.

3) Registration:

- The caution card is not required to be registered.

4) Authority:

- The caution card does not imply CLEARANCE authority and shall not be used for such purpose.

C. Information Card

1) Physical Characteristics:

- The information card is white with the word "INFORMATION" printed across the top. Ruled horizontal lines are provided where information can be written.

- 2) Use:
 - The purpose of the information card is to provide status information, general information, or instructions.
- 3) Registration:
 - The information card is not required to be registered.
- 4) Authority:
 - The information card does not imply CLEARANCE authority and shall not be used for such purpose.

D. Master Tag Control Mechanism

- 1) Physical Characteristics:
 - a) Document that is maintained and controlled by the AA. This document can be electronic or paper.
 - b) This document shall include:
 1. Requestor
 2. Requested date & time
 3. Cleared by personnel (when available)
 4. Clearance verification signature (written or electronic acknowledgement)
 5. Purpose
 6. Clearance release signature (written or electronic acknowledgement)
 7. Release date & time
 8. Unique certificate number
 9. Certificate/Equipment name
- 2) Use:
 - Formal register for AUTHORIZED PERSONS holding clearance.
- 3) Registration:
 - a) The personnel performing the work, maintenance activities, inspections, etc. **SHALL** sign or electronically acknowledge the MTCM for the specific equipment.
 - b) As each clearance request is released a record of this action shall be made on the appropriate MTCM.
 - c) A copy of completed MTCMs should be kept on file for a minimum of 90 days.
- 4) Authority:
 - MTCMs with Hold Cards have absolute CLEARANCE authority.

Lockout/Tagout Procedure Sequence of Events

1. CLEARANCE request

- The carding CLEARANCE request is prepared for the associated equipment so proper ENERGY SOURCE isolation can be applied in preparation for anticipated work.
- This request may be completed electronically or by filling out a CLEARANCE Request Form.
- Walk-in/verbal CLEARANCE requests will be processed on an as needed basis.
- Any CLEARANCE performed for the Transmission Electric System Coordinators at Simpsonville shall be in accordance with the Transmission Control Center's Carding and Clearance written program and the "Operational Control and Lockout/Tagout Authority at Generating Stations".

2. The CLEARANCE request is prepared by:

The Maintenance Service Leader, Chief, Planner, Scheduler, or alike will prepare the CLEARANCE request at the time the work (or Work Order) is planned.

- The CLEARANCE request may become part of a work package or work plan.
- All sections of the requests shall be completed prior to the delivery of the request to the AA.
- Plants with electronic capabilities may request CLEARANCE via computer.

3. The CLEARANCE request is completed by:

The AA completes the following, as applicable, on the specific type of request used:

- CLEARANCE request complete: Signed by the on-duty AA at the time the carding is completed. Date and time are also entered.
- After the AA has completed all applicable paperwork, the CLEARANCE request is placed in the CLEARANCE request box.

Then:

- The CLEARANCE request shall be made available to either the employee or issuer upon request.
- If the CLEARANCE cannot be granted, the AA will check this space and write the reason for not granting CLEARANCE.

4. Ordering CLEARANCE

- The AA shall originate all energy isolation orders.

- ENERGY ISOLATION PROCEDURES shall be conducted only by properly designated AUTHORIZED PERSONS.
- The AA shall ENSURE proper ENERGY SOURCE isolation is consistent with the requirements of these LOTO PROCEDURES and any equipment specific energy isolation procedures.
- All oral orders pertaining to energy isolation and CLEARANCES shall be repeated back to each other to guard against a misunderstanding.

5. Standards for placing Hold Cards on devices for LOTO

- The LOTO of control devices (where applicable) shall occur before electrical isolation, and electrical isolation shall be completed prior to the non-electrical isolation of equipment.
- If software control systems exist and the systems will allow the application of a “red tag” (or other software inhibiting logic) and associated CERTIFICATE NUMBER, a CERTIFICATE NUMBER shall be generated and entered into the system or posted in a central location.
- On medium and low voltage switchgears, control fuses shall be removed (or disconnects opened) from the circuit prior to the isolation of the breaker unless removing the fuse constitutes a greater danger of electrical exposure.
- When confronted with an equipment condition that prevents the completion of the isolation procedure, the qualified employee applying the energy isolation procedure shall stop and report the problem to the AA for further review.
- When confronted with a clearance condition that requires deviation from the written procedure a variance must be approved by the General Manager or his/her designee before proceeding. The active variance form will be submitted to the Administrative Authority once the appropriate signatures are attained and routed to the Safety Specialist upon completion of the defined work. See Appendix E.
- The proper location for attaching the Hold Card is at the same point on the ENERGY ISOLATING DEVICE to which a lock would be attached and in such a manner that the card cannot be inadvertently detached. If the ENERGY ISOLATING DEVICE is not equipped to receive a lock, then the card shall be attached as near as practicable to the device providing CLEARANCE and in a position that will be immediately obvious to anyone attempting to operate the device.
- Should an isolated device be removed from service for maintenance, repair or replacement, the employee performing said work shall notify the AA requesting relocation of the Hold Card to a location as near as practicable to the original device’s location. If relocation of the card is approved by the AA, relocation of the tag shall **only** be performed by an AUTHORIZED PERSON. When the new or repaired device is placed back in to service, the employee performing said work shall again notify the AA that the procedure has been completed and the Hold Card shall be relocated to the new device. As an example, if a medium voltage breaker requires maintenance, the breaker shall have its Hold Card relocated to the cubicle

from which it came and the breaker may be physically removed from the cubicle and repaired, having no card applied.

- Crews performing work at REMOTE SITES may provide their own CLEARANCES. CLEARANCES shall be visually verified by at least two (2) people.

6. Procedure for verifying Energy Isolation on electrical breakers

To verify that power has been disconnected the following procedure shall be followed:

A visual inspection is the recommended technique to verify electrical isolation. In cases where it is impossible to make a positive visual determination of the isolation, such as low voltage molded case circuit breakers, an electrical test shall be made to ENSURE that isolation is complete. For three phase power systems, the minimum checks to be made are as follows:

1. Check the voltage between L1 and L2. The test instrument should show voltage. This shows that the test instrument works.
2. Check the voltage between the following terminals:
 - L1 to T2
 - L1 to T3

No voltage should be shown in any test in this step.
3. Check the voltage between terminals L1 and L2. The test instrument should show voltage. This ENSURES that the test instrument kept its integrity during the test and allows for establishing a positive test connection to L2.
4. Check the voltage between the following terminals:
 - L2 to T1

No voltage should be shown in any test in this step.
5. Check the voltage between terminals L1 and L2. The test instrument should show voltage. This ENSURES that the test instrument kept its integrity during the test.
6. If any of the above steps (#1-#5) do not test as specified, the breaker should be left in the racked out or off position. CLEARANCE should not be given and the breaker should be immediately reported to the AA as a case of trouble.
7. It is expected that due to the various designs of equipment, application of the above procedure may not be possible in all cases. One example would be the case of a molded case circuit breaker with permanently affixed terminal guards. In these cases, it shall be the responsibility of that location's Operations/Production team to develop and implement an alternative testing procedure for that specific gear which positively establishes electrical isolation consistent with 1910.269 and 1910.147.

NOTE: At no time shall anyone perform voltage checks across a breaker or other isolation device once a Hold Card has been affixed.

7. Checking CLEARANCE

a) For LG&E KU Power Production Employees and RESIDENT CONTRACTOR employees

- **Before** an employee is granted CLEARANCE, the employee shall check and ENSURE that all Hold Cards are in place at all ENERGY ISOLATION DEVICES listed and sign on to the associated MTCM(s). Any Hold Cards in place on associated SWITCHES may be checked if so desired. However, an employee is not required to ENSURE that all Hold Cards are in place on all associated SWITCHES before CLEARANCE is granted but must sign on to the MTCM. If any AUTHORIZED PERSON requesting the Hold Card cannot assure him/herself that the equipment is properly isolated, he/she shall seek assistance from the AA.

b) For Sizable LG&E KU Power Production Work Groups and Contractors working under the direct supervision of an LG&E KU Power Production Employee

This is an optional procedure allowing the use of an MTCM SUBSHEET. It may be applied by any designated PERSON IN CHARGE where:

- The work to be completed is a job that involves a “sizable work group”.
- The Maintenance Manager of the facility has approved the application of the MTCM SUBSHEET for this job.

The designated PERSON IN CHARGE shall obtain CLEARANCE on the necessary equipment to provide proper energy isolation for the employees and/or contractors involved.

- **Before** a “PERSON IN CHARGE” is granted CLEARANCE, the employee shall check and ENSURE that all Hold Cards are in place at all ENERGY ISOLATION DEVICES listed and sign on to the associated MTCM(s). Any Hold Cards in place on associated SWITCHES may be checked if so desired. However, an employee is not required to ENSURE that all Hold Cards are in place on all associated SWITCHES before CLEARANCE is granted. If any person (AUTHORIZED PERSON) requesting the Hold Card cannot assure him/herself that the equipment is properly isolated, he/she shall seek assistance from the AA.

The AA shall issue MTCM SUBSHEETS to the designated PERSON IN CHARGE who shall ENSURE that all employees for whom they are responsible have signed

on the MTCM SUBSHEET and shall inform the employees that they **may** check the CLEARANCE for which they are signing.

The designated PERSON IN CHARGE shall not release CLEARANCE on the MTCM until each of the persons signed on to the MTCM SUBSHEETS have signed off for the specific equipment.

The MTCM SUBSHEET shall be controlled by the designated PERSON IN CHARGE at all times and must be returned to the AA prior to the designated PERSON IN CHARGE being allowed to release CLEARANCE on the AA's MTCM(s). The AA shall verify the accuracy of the MTCM SUBSHEET and shall dispose of the sheet at his/her discretion.

c) For Resident or Non-Resident Contractors with a designated PERSON IN CHARGE

The contractor shall ENSURE that all employees receiving a CLEARANCE have completed training on the LG&E KU Power Production LOTO PROCEDURES specific to LG&E KU Power Production facilities.

- **Before** a "PERSON IN CHARGE" is granted CLEARANCE, the employee shall check and ENSURE that all Hold Cards are in place at all ENERGY ISOLATION DEVICES listed and sign on to the associated MTCM(s). Any Hold Cards in place on associated SWITCHES **may** be checked if so desired. However, an employee is not required to ENSURE that all Hold Cards are in place on all associated SWITCHES before CLEARANCE is granted. If any person (AUTHORIZED PERSON) requesting the Hold Card cannot assure him/herself that the equipment is properly isolated, he/she shall seek assistance from the AA.

The LG&E KU Power Production job proponent responsible for the contractor's work shall ENSURE that LOTO programs are exchanged and agreed to between the contractor and the facility's management prior to the initiation of any work that will require a CLEARANCE.

The LG&E KU Power Production job proponent shall hold CLEARANCE, as deemed necessary by Management, on all necessary equipment for these contractors until the contractor's work is completed and inspected to ENSURE the safety of the employees and the equipment.

The contractor shall designate a PERSON IN CHARGE who shall hold CLEARANCE on all necessary equipment.

- In addition, the contractor shall provide a "Lockout/Tagout Procedure Acknowledgement" to the appropriate LG&E KU Power Production Health and Safety Specialist listing the employees that have the authority to

request clearances for their company. These contractor employees are the only personnel that will be permitted to request CLEARANCE on the MTCM. See Appendix B. A 24-hour telephone number must be provided by the contractor for the PERSON IN CHARGE. Only contractor employees identified on Appendix B will be added to the users list or added to the MTCM. The contractor's name shall be promptly removed from the users list after the effective date given on the "Lockout/Tagout Procedure Acknowledgement".

After performing the proper clearance checks and receiving CLEARANCE, the PERSON IN CHARGE shall receive MTCM SUBSHEETS on the equipment necessary to provide adequate CLEARANCE as specified by the AA.

The PERSON IN CHARGE shall administer the MTCM SUBSHEETS as required within these LOTO PROCEDURES and ENSURE the security of the MTCM SUBSHEETS at all times.

Where the contractor is not QUALIFIED and CERTIFIED, an escort shall be provided through the AA or LG&E-KU proponent where electrical exposures require proper inspection of CLEARANCE devices.

The PERSON IN CHARGE shall ENSURE that all workers who require clearance for whom they are responsible have signed on the applicable SUBSHEET before work begins and shall inform the employees that they may check the CLEARANCE for which they are signing.

The PERSON IN CHARGE shall not release CLEARANCE on the MTCM until each of the persons signed on to the MTCM SUBSHEETS have signed off for the specific equipment. These sheets will not be returned to the AA.

8. Procedure for releasing CLEARANCE and removing CARDS on devices for LOTO

Where MTCMs are in place, electrical energy isolation orders shall not be initiated for the removal of the electrical isolation until equipment is properly aligned for service. This would not apply for uncoupled motors being bumped to confirm rotation.

CLEARANCE TRANSFER – If transfer of CLEARANCE is required before the completion of a job, the employee shall ensure continuity of CLEARANCE by notifying the AA and ensuring transfer of CLEARANCE to another employee before the release of CLEARANCE.

CLEARANCE RELEASE (NORMAL) – Upon completion of maintenance, all persons holding CLEARANCE (AUTHORIZED PERSON) shall release their CLEARANCE and personally notify the AA if he/she was the last employee holding CLEARANCE.

CLEARANCE RELEASE (TELEPHONE) – If Hold Carded equipment is needed for service and the individual who holds CLEARANCE is offsite or at a REMOTE SITE, and has not performed a CLEARANCE release, attempts shall be made to contact him/her by phone. If the individual is contacted by phone, and the piece of equipment is capable of operation, the AA shall request CLEARANCE from the employee. This transaction shall be verified by a third party. The AA shall note in the comment section of the MTCM that the release was made by phone and the employee's supervisor shall be notified.

CLEARANCE RELEASE Where the Requester Has Not Received CLEARANCE – If Hold Carded equipment is needed for service and the requester does not hold CLEARANCE, attempts shall be made to contact him/her by phone. If the individual is not available by phone, and the piece of equipment is capable of operation, the AA can, at his/her discretion, perform the CLEARANCE release. The AA shall note in the comment section of the MTCM that the release was made and the employee's supervisor shall be notified.

CLEARANCE RELEASE (GENERAL MANAGER) – If the individual whose name appears on the MTCM cannot be contacted and a CLEARANCE check has been performed, and the equipment is required for service, the station General Manager or his/her designee shall have the authority to release the MTCM in question. This will only be done after a complete and thorough check-out. The AA shall ENSURE that the person is notified that their CLEARANCE has been released as soon as possible, but not later than the initiation of work on the person's next scheduled work day.

Training and Competencies

Level of Training

In general, the level of training provided must be adequate for the tasks involved in order to insure that work is performed in a safe manner:

QUALIFIED and AUTHORIZED PERSONS shall be trained and knowledgeable of the construction and operation of the equipment and the hazards involved.

NON-QUALIFIED and AFFECTED employees shall be trained in any safety-related practices necessary to ENSURE their safety, but are not authorized to work on or near ENERGIZED parts nor have exposures to the potential release of energy from any form of ENERGY SOURCE.

The Employer shall determine that each employee is complying with the safety-related work practices required here-in through:

- a) Regular Supervision, **and**
- b) PERIODIC INSPECTIONS (Appendix C)

Employees shall receive LOTO training annually and shall receive additional training if:

- a) Either supervision or PERIODIC INSPECTIONS identify a deficiency.
- b) New technology or equipment is applied or if procedures are changed.
- c) The employee must apply LOTO PROCEDURES not normally used during his/her regular job duties.
- d) Employees performing LOTO PROCEDURES less than once a year should be retrained before performance of work.

LOTO training shall be either of class room type or on the job and must be documented in either case.

LOTO training shall:

Establish the employee's proficiency in the LOTO PROCEDURES. The employer shall CERTIFY the employee performing ENERGY ISOLATION PROCEDURES clearly understands the scope, purpose, authorization, rules and techniques to be utilized for the control of the ENERGY SOURCE.

Records of training shall be maintained on each AUTHORIZED PERSON.

- A. Training shall be provided annually for all LG&E KU Power Production employees to ensure that the purpose and function of the energy control program are understood and the knowledge and skills required for the safe application and usage are acquired by the employees. The training shall be documented and shall consist of:

1. The Lockout/Tagout procedures including:

- Scope
- Clearance request & requestor procedures
- Clearance steps & application
- Clearance documentation
- Testing & inspection
- Definitions

2. The type and magnitude of the energy available in the workplace
3. The limits and functions of the different LOTO devices
4. Safety related work practices involved in performing work task

New employees or employees transferred from other areas shall receive training specific to the sections above before the employee participates in any activities detailed therein.

Affected employees shall be instructed about the procedure and about the restrictions relating to attempts to restart or re-energize machines or equipment which is locked out or Hold Carded.

B. In addition:

- Qualified employees shall complete the requirements of LG&E KU Power Production Electrical Safe Work Practices Employee Training on an annual basis.
- Qualified employees applying electrical and non-electrical isolation procedures shall be trained, qualified and certified in the application of those procedures.

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Isolation for Electrical Testing of Low Voltage MCC Control Circuits

It is recognized that:

- Instrument/Electrical (I/E) personnel will need to complete electrical testing on 480 control circuits fed from MCCs (buckets) during the course of normal maintenance procedures or subsequent to new construction or renovation.
- In this case, the “Primary Disconnect” (the molded case circuit breaker located in the MCC bucket, etc.) will need to be closed in order to energize the controls and test the circuit. This must be achieved without voiding CLEARANCE integrity for those who are protected from the potential release of hazardous energy by the isolation of the “Primary Disconnect”.
- For this situation, CLEARANCE may be transferred from the original point of isolation to the disconnected circuit leads. The requester must contact and satisfy all other personnel who currently have CLEARANCE applied to the equipment that testing may be completed in a safe manner that will not void their CLEARANCE and that the point of electrical isolation is being transferred to the disconnected leads from the breaker. Each of these personnel must contact the AA to accept the testing under their CLEARANCE before the requester may be allowed to conduct the testing.
- Documentation of this activity shall be accomplished through use of the “Lockout/Tagout Variance” form in Appendix E.

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Temporary Grounding for the Protection of Employees

In general, only QUALIFIED Instrument/Electrical (I/E), or Substation Maintenance Personnel responsible for the application of grounds and grounding devices shall apply grounds at LG&E KU Power Production facilities. **Grounding practices shall be consistent with the Health and Safety Manual.**

Grounding for Electrical Protection:

- a) Hold Cards shall be applied to the grounds.
- b) Operations personnel shall be responsible for installation or removal of grounds only when ground application is made with a switching device such as ground disconnects or switchgear ground and test device. When safety grounds cannot be applied with a switching device, appropriate QUALIFIED maintenance personnel will apply and remove the safety grounds.

Static Grounds:

- a) Any personnel specifically QUALIFIED may complete specific grounding operations on tools and equipment for the purpose of grounding for static protection.

Hold Cards shall not be required for the purpose of grounding for static protection.

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Lockout of Non-Generating Equipment

If an energy isolating device of non-generation equipment is capable of being locked, then it shall be locked. Tracking of locked equipment shall be accomplished per section Hold Card Description – A.3.b. Isolation tracking of locked, non-generation equipment by means of the MTCM may be waived by the plant management for maintenance shop tools used on a routine basis. The energy isolation procedures outlined herein do not preclude any requirements under NFPA-70E.

This procedure establishes specific Lockout criteria for hazardous energy isolation of **non-generation**, transmission and distribution equipment. Specifically, it applies to the control of energy during servicing and/or maintenance of non-generation machines and equipment that can be locked out, i.e., machines or equipment in which the unexpected energization or start-up, or release of stored energy could cause injury to employees.

NOTE – Exception to the above: If an energy isolating device is not capable of being locked out, the Hold Card procedure shall be followed. Any non-generation equipment that is replaced undergoes major repairs, renovation, or modification shall be designed to accept a lockout device.

Routine operation of non-generating equipment, i.e. servicing and/or maintenance, are not covered by this procedure unless:

- a. An employee is required to remove or bypass a guard or other safety device, or
- b. An employee is required to place any part of their body into the point of operation or where an associated danger zone exists during a machine operating cycle.

NOTE – Exception to the above: Minor tool changes and adjustments, and other minor servicing activities that take place during normal operations of the affected component are not covered by the procedure if they are routine, repetitive, and integral to the use of the equipment for operation, provided that the work is performed using alternative measures which provide effective protection.

Work on cord and plug connected electric equipment for which exposure to the hazards of unexpected energization or start-up is controlled by unplugging the equipment from the energy source does not require lockout as long as the plug is under the exclusive control of the employee performing such work.

CAUTION – Cord and plug connectors greater than 220 volts cannot be disconnected unless the energy source to the plug has been isolated and locked out per the procedures stipulated by this document OR unless a switch rated plug and receptacle designed to break connections even in overload conditions is used.

Employee Responsibility

- 1) AUTHORIZED PERSONS are required to lockout and tagout machinery and equipment and restore it to service in accordance with OSHA requirements and LG&E KU Power Production Lockout and Tagout procedures.
- 2) No employee shall attempt to start, energize, or use any machine or piece of equipment that is locked or tagged out.
- 3) Each employee must comply at all times with provisions of this lockout, tagout program, the OSHA lockout, tagout standards, and all rules, regulations and orders that are applicable to their own actions and conduct.

Lock Identification: See Appendix F.

Lockout Procedures

Electrical Lockout

- 1) Request
 - a. Requester contacts the "Administrative Authority" and requests electrical clearance on **non-generation** equipment.
 - b. Requester shall give a reason for the clearance request of this equipment.
- 2) Order
 - a. Only the major points of isolation shall have a lock applied. For example, the 480 volt breaker will be locked, but the control switch would not be locked.
 - b. If the equipment or device can be removed from service, the Administrative Authority will have equipment isolated and locked with Operation's lock and Hold Card. The lock shall be applied to a safety lockout hasp.
 - c. An Operation's lock, when used, will be first on and last off. While the Operation's lock is on an energy isolating device, the lock's key shall be maintained by the AA in a designated area and shall have a hold card affixed to the lock as a means of identification.
- 3) Order Complete
 - a. After the designated AUTHORIZED PERSON has performed the necessary functions and the Operation's lock is in place, they shall report to the AA that the equipment has been locked and carded.
- 4) Request Granted
 - a. After the card is logged in the appropriate log, the AA will issue clearance authority to the requester that they may now hang their lock.
 - b. The requester will hang their individual lock.

NOTE – If more than one individual is required to service or maintain machinery or equipment, each employee shall follow the above procedure and request clearance and hang their lock.

Mechanical Lockout

- Shall be the same as Electrical Lockout.
- Valves for water, hydraulic pressure, or other sources of energy shall be locked when applicable. When there are double valves, at least one shall be locked.

Restoring Equipment To Service

When the job is completed and the equipment is all clear, the holder of the clearance authority shall remove their identified lock and notify the “Administrative Authority”. The AA may then order the Operation’s lock to be removed if appropriate.

Inspect the work area to ensure that:

- all non-essential items have been removed
- the machine or equipment components are operationally intact
- no personnel are exposed to any hazards

After all locks have been removed and the area has been inspected, the MTCM (if required) may be restored and equipment made ready for testing and/or normal service.

nyc *BE*

New Construction Lockout Procedures and Authority

Turn Key Projects

This shall be defined as projects such as the addition of a new generation unit, large pollution control retrofit project, or other large scale projects not managed by the Stations. This option may be applied with the approval of the Plant General Manager and the Director of the department managing the Turn Key Project and requires the approval of both.

- 1) The General Contractor for the major project shall act as the Lockout Authority and shall supply CLEARANCE AUTHORITY, SWITCHING AUTHORITY and QUALIFIED PERSONS consistent with this LG&E KU Power Production Lockout Tagout Policy.
- 2) All contract employees and LG&E KU Power Production personnel shall request and receive clearance on equipment through lockout procedures from the general contractor's Administrative Authority until the Facility Manager has accepted the transfer of authority over the equipment or system from the general contractor.
- 3) A specific list of the equipment transferred to the authority of the Plant General Manager shall be maintained by the facility's Administrative Authority, the department managing the Turn Key Project, and the general contractor's Administrative Authority to ensure that effective Energy Isolation and Lockout Authority is maintained for all equipment during the entire project.

npe *BS*

APPENDIX A

Operational Control and Lock-Out/Tag-Out Authority at Generating Stations

Purpose

Generating Stations generate power into the Transmission/Distribution Systems and receive auxiliary power from the Transmission/Distribution Systems. The purpose of this document is to define Operational Control and Lock-Out/Tag-Out Authority (LOTA) of assets needed to generate power into the Transmission/Distribution Systems and receive auxiliary power from the Transmission/Distribution Systems. This document will also define additional requirements for LOTA of assets/operating equipment at generating stations.

Operational Control and Lock-Out/Tag-Out Authority

Transmission System Control Center (TSCC) shall have operational control and lock-out/tag-out authority of all assets at or above 69KV. Generation shall have operational control and lock-out authority of generation owned assets below 69KV.

Operational control does not necessarily define who actually operates the asset. Operational control defines control responsibility. TSCC has, for example, operational control of the Mill Creek 345KV generator primary circuit breakers. TSCC grants Mill Creek the permission to close a 345KV breaker during the synchronization of a generating unit to the Transmission System.

TSCC and Generation shall have joint operational control and joint lock-out authority of all Transmission interface assets and some Distribution interface assets. An interface asset in this document is defined as a Transmission or Distribution assets that when carded provides clearance and isolation of generation assets from the Transmission or Distribution System. Appendix A lists Transmission interface assets with shared operational control and shared lock-out authority.

Some generating plants have auxiliary loads that are powered from Distribution lines. Distribution Dispatch have sole operational control and sole lock-out/tag-out authority of the last overhead Distribution lines disconnect (interface assets) feeding a Generation load. Generation and Distribution Dispatch will have joint operational control and joint lock-out authority of non-overhead interface assets disconnects.

All interface assets can only be operated after notification of Generation and TSCC or Generation and KU/LG&E Distribution Dispatch. If an interface asset can be energized from both Generation and Transmission/Distribution, clearance must be given from both Generation and Transmission/Distribution before maintenance can begin on an interface asset.

Employees and/or contractors that are performing work on an asset and require clearance from the lock-out/tag-out authority for that asset shall follow the policy and procedures of the respective lock-out/tag-out authority. When the work involves an asset that has energy sources under the responsibility of multiple lock-out/tag-out authorities, the PERSON IN CHARGE of the work shall obtain clearance from each authority before starting work. When more than one department (Generation/Transmission/Distribution) requests clearance for the same asset at the same time, the PERSON IN CHARGE from each department will request and obtain separate clearance from each authority involved. For example, a Distribution employee in charge of work on Transmission interface assets during a unit outage will request and obtain required clearance from the TSCC and the local plant authority. That Distribution employee will not work under the clearance obtained by a Generation employee. Personal grounds can only be added while having clearance on an asset. Personal grounds must be removed before releasing clearance back to the lock-out/tag-out authority.

Exceptions or clarification to the operational control and lock-out authority definition presented above are:

- TSCC currently has and will continue to have operational control and lock-out authority of the three Distribution feeders at the Cane Run Plant (1420, 1421, & 1422).
- TSCC currently has and will continue to have operational control and lock-out authority of the Paddys Run GEN 11-A and GEN 12-B 14KV oil circuit breakers. These breakers tie PR11 and PR12 to the Paddys Run 14KV Bus.
- TSCC currently has and will continue to have sole operational control and sole lock-out authority of the Mill Creek 345 disconnects: MC-501 Line, MC-501Bus, MC-501 Line Tie, MC-531 Line Tie, MC-502 Line, MC-502Bus, MC-502 Line Tie, MC-532 Line Tie, MC-503 Line, MC-503Bus, MC-503 Line Tie, MC-533 Line Tie, MC-504 Line, MC-504Bus, MC-504 Line Tie, & MC-534 Line Tie.
- TSCC currently has and will continue to have sole operational control and sole lock-out authority of the Trimble County 345 disconnects TC-501 Line, TC-501 Bus, TC-501 Line Tie, & TC-531 Line Tie.

The TSCC has two centers that handle operational control and lock-out authority responsibilities. These centers are Waterside and Dix Dam. Waterside is normally responsible for the LG&E plants and Dix Dam is responsible for the KU plants.

The Distribution operational control and lock-out authority responsibilities are handled by KU/LG&E Distribution Dispatch.

The Generation operational control and lock-out authority responsibilities are handled locally at each of the generating plants. Contact numbers for the two TSCC centers, Distribution, and each of the generating plants are listed below.

Simpsonville	502 333 6704
Dix Dam	859 748 5221
Brown Control Rm 1&2	859 748 4631
Brown Control Rm 3	859 748 4633

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Brown CTs	859 748 4433
Cane Run	502 449 8031
Ghent 1&2	502 347 4126
Ghent 3&4	502 347 4128
Green River	270 757 3122
Mill Creek	502 933 6701
Ohio Falls	502 627 2855
Trimble County	502 627 6230
Tyrone	859 879 3505
KU Distribution Dispatch	859 367 1358
LG&E Distribution Dispatch	502 627 3401

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APPENDIX B

**LOCKOUT/TAGOUT PROCEDURE ACKNOWLEDGMENT
For Contractors to designate "PERSON IN CHARGE"**

I, _____, affirm that I am the duly

AUTHORIZED _____ of

_____ ; (hereinafter the "Independent Contractor") and as such, have full authority to bind the Independent Contractor. On behalf of the Independent Contractor, I acknowledge that the Independent Contractor is fully aware of the LOCKOUT/TAGOUT Procedure and will strictly observe its requirements. In the event that the Independent contractor should ever breach this procedure, such breach will provide LGE-KU with a right to immediately terminate any contract or agreement relating to goods or services being supplied by the Independent Contractor at the

_____ Generating Station. In the event the Independent Contractor uses subcontractors in supplying such goods or services, the Independent Contractor shall be jointly and severally responsible for compliance by such subcontractors with the LOCKOUT/TAGOUT Procedure.

LIST BELOW THOSE PERSONS AUTHORIZED TO HOLD CARD:

Name	24hr Phone Number	Signature
Name	24hr Phone Number	Signature
Name	24hr Phone Number	Signature
Name	24hr Phone Number	Signature
Name	24hr Phone Number	Signature

Work dates from _____ to _____

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APPENDIX C

Periodic Inspection Form

QUALIFIED Person performing the inspection:

Name _____ E# _____

Date: _____ Station _____

QUALIFIED employee being inspected:

Name: _____ E# _____

Procedure performed during inspection (be specific)

Variances identified during the inspection (be specific)

Detail retraining and proper performance of the procedure (be specific)

(Use the back side of the form if additional space is required.)

Inspector's signature:

_____ Date: _____

Maintain a copy of this document and send or deliver the original to the station Health & Safety Specialist.

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APPENDIX D

Lockout / Tagout of Radiation Sources to Prevent Employee Exposure

1. The facility's RSO (Radiation Safety Officer), or in their absence, a QUALIFIED User, shall be contacted before beginning work on or around nuclear devices where it is possible for any portion of an individual's body to receive exposure to the radiation beam from the device.
2. Where the RSO determines that exposures are possible during the proposed work process, the RSO (or designated QUALIFIED User under the radiation Safety Standard) shall switch the radiation source to its closed or off position and apply any specific testing required under the Radiation Safety Requirements to ENSURE its isolation.
3. An AUTHORIZED PERSON shall apply a lock or a Hold Card to the closed and tested radiation source for the AA.
 - a. Tagout shall be applied to radiation sources associated with GENERATION EQUIPMENT.
 - b. Lockout shall be applied to radiation sources associated with NON-GENERATION EQUIPMENT and all Marine Standard related equipment.
4. All workers with potential exposures must request CLEARANCE through established procedures. Then and only then will the employees be allowed to start that portion of their work where exposures have been deemed possible by the RSO.
5. When the workers have completed their tasks and released their CLEARANCES through established procedures the AA shall inform the RSO/QUALIFIED User that the job is complete. The AA shall then designate an AUTHORIZED PERSON to remove the Hold Card and lock.

APPENDIX E

**LG&E KU Power Production
Lockout/Tagout Variance**

Location: _____
Work task: _____

Unit: _____
Date: _____

Description of work:

Reason for variance:

Description of variance and duration requested:

Project manager requesting variance

Department Supervision

Safety Specialist

Senior crew member on equipment

Senior crew member on equipment

Senior crew member on equipment

Senior crew member on equipment

Senior crew member on equipment

Shift Supervisor / Production Leader

General Manager/Appointed Designee

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APPENDIX F

Lock Identification

1. Physical Description

- a) Only locks designed for the purpose of LOCKOUT shall be used. Any person who is aware of any lock being used for lockout that does not satisfy the following requirements must immediately report the finding to their Supervisor. That Supervisor shall take immediate steps to ENSURE that the lock in question meets the proper requirements or that a suitable replacement lock is provided.
- b) These locks have been determined to be capable of withstanding the environment to which they are exposed for the maximum period of time that exposure is expected.
- c) These locks are of such construction as to prevent removal when in place by any means (other than the regular key) without the use of excessive force or unusual techniques (such as with the use of bolt cutters or other metal-cutting tools).

2. Identification

- a) Each person's lock(s) shall be uniquely keyed.
- b) There shall be **no** master key.
- c) Locks are identified as:
 - Operation's locks shall be uniform in color.
 - Locks for the Maintenance Groups (Mechanical, Instrument, Electrical, Coal Handling, Limestone or Building) can be any color as determined by the facility.
 - All personal locks shall be provided with an identifier indicating the name of the employee who applied the lock.
- d) Each facility will maintain an ample number of locks, and supply as needed to their AUTHORIZED PERSONS.

It is required that whenever locks are used to provide energy isolation, that Hold Cards with MTCM s be issued first. Persons placing their personal lock(s) must first have signed on the MTCM and received CLEARANCE.

CONFINED SPACE PROGRAM

**LG&E AND KU
220 WEST MAIN ST.
LOUISVILLE, KY 40202**

Revised 04/04/08

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LG&E and KU

Confined Space Program

Authored By: _____

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Approved By:

Manager, Health and Safety _____

Barbara Hawkins, RN

Date: _____

Effective Date: August 23, 2011

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(signed copy on file in Corporate Health & Safety office)

asf *BE*

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I. GENERAL

A. Purpose

The purpose of this program is to ensure we are:

- Assessing potential confined space exposures,
- Assigning the appropriate control measures,
- Educating employees to the hazards of confined spaces and methods they should use to protect themselves, and
- Complying with 29 CFR 1910.146.

This program provides information and guidance necessary to comply with the confined space program of LG&E AND KU and is consistent with state and federal Occupational Safety and Health Administration (OSHA) standards. This program delineates responsibilities and describes procedures to be used when confined spaces are present in the workplace.

B. Scope

This document is applicable to all LG&E AND KU personnel who are performing duties in or around confined spaces.

C. Responsibility

All employees have responsibility for ensuring compliance with this program. Specific responsibilities are outlined below:

- 1) Corporate Health and Safety is responsible for:
 - a) Updating the written corporate Confined Space Program.
 - b) Conducting and documenting reviews of the program at company workplaces.
 - c) Assisting the Business Units (BU) with development of job procedures for projects involving confined spaces.
- 2) Business Unit managers are responsible to provide:
 - a) Resources and enforcement toward the identification and evaluation of projects involving confined spaces.
 - b) Necessary support to ensure documentation of required record keeping activities.
 - c) Necessary supports to ensure employees attend annual training classes.
 - d) Inclusion of the program responsibilities in employees' annual performance objectives, as appropriate, and that those employees are held accountable for completion of these responsibilities.
- 3) Health and Safety Specialists and Safety/Technical Training Consultants are responsible for:
 - a) Maintaining a record of permit required confined spaces in their facilities and/or identifying permit-required confined spaces that their employees encounter, including the basis for the determination.
 - b) Maintaining a list of all properly trained company personnel under their jurisdiction and their assigned job activities that may involve confined spaces.
 - c) Providing oversight to all projects that are anticipated to involve confined spaces, within their jurisdiction. Oversight shall also include contractors' projects anticipated to involve confined spaces.

- d) Working with Supervisors/Team Leaders or Contractor Proponents, as applicable, and employees to develop procedures and assist with selection of engineering controls and work practices to protect employees.
 - e) Ensuring revisions in the BU written program are communicated to training coordinators for inclusion in annual training text, as appropriate.
- 4) Contractor Proponents are responsible for projects when a contractor is tasked to perform the work. The Contractor Proponent will assume the responsibilities of an Entry Supervisor/Team Leader for these projects; however, the actual tasks/functions of the Supervisor/Team Leader may be performed by the contractor. Contractor Proponents are responsible to ensure:
- a) That the BU or facility Health and Safety Specialist or Safety/Technical Training Consultant has been contacted to identify confined spaces that will be involved in the project and to notify her/him of planned start and finish dates of the project.
 - b) That contractors assigned to work on projects involving confined spaces are in compliance with all federal, state, and local regulations and the requirements of this corporate program and shall require the contractor to come into compliance when necessary.
 - c) That a debriefing is held with the contractor(s) at the conclusion of the entry operations regarding the permit required confined space program followed and regarding any hazards confronted or created in the permit spaces during entry operations.
- 5) Entry Supervisors/Team Leaders are responsible for projects when LG&E AND KU employees are tasked to perform the work. Supervisors/Team Leaders shall:
- a) Ensure that employees assigned to work on projects involving confined spaces attend initial and annual training appropriate for the type(s) of work they will perform.
 - b) Ensure that a hazard evaluation is conducted before the project commences to ascertain expected exposures and controls during the project.
 - c) Ensure that air monitoring is scheduled and conducted prior to initial entry to document the appropriateness of engineering controls, personal protective equipment, and respiratory protection.
 - d) For permit-required confined spaces, ensure that appropriate entries have been made on the permit.
 - e) For permit-required confined spaces, terminate entries and cancel the permit when either:
 - i) The entry operations covered by the permit are completed; or
 - ii) A condition that is not covered by the entry permit arises in or near the permit space.
 - f) Ensure that personal protective equipment, including respiratory protection is provided to and used by employees, as needed.
 - g) Verify that rescue services are available and that a means for summoning them are operable.
 - h) Remove any unauthorized individuals who enter or try to enter the permit space during entry operations.
 - i) Ensure that entry operations remain consistent with the terms of the entry permit and that acceptable entry conditions are maintained throughout the duration that the permit is in effect.
- 6) Employees who are assigned to work on projects involving confined spaces shall:
- a) Maintain their training certification for the type(s) of work they will be expected to perform.
 - b) Wear personal protective equipment on tasks where such protection is required.
 - c) Follow the work procedures specified for the assigned tasks.
 - d) Duties of Authorized Entrants:
 - i) Know the hazards that may be faced during entry, including information on the mode, signs or symptoms, and consequences of the exposure.
 - ii) Properly use required equipment.
 - iii) Communicate with the attendant as necessary to enable the attendant to monitor entrant status and to enable the attendant to alert entrants of the need to evacuate the space.
 - iv) Alert the attendant whenever:

- A) The entrant recognizes any warning sign or symptom of exposure to a dangerous situation, or
- B) The entrant detects a prohibited condition.
- v) Exit from the permit space as quickly as possible whenever:
 - A) An order to evacuate is given by the attendant or the entry supervisor,
 - B) The entrant recognizes any warning sign or symptom of exposure to a dangerous situation,
 - C) The entrant detects a prohibited condition, or
 - D) An evacuation alarm is activated.
- e) Duties of Attendants:
 - i) Know the hazards that may be faced during entry, including information on the mode, signs or symptoms, and consequences of the exposure.
 - ii) Be aware of possible behavioral effects of hazard exposure in authorized entrants.
 - iii) Continuously maintains an accurate count of authorized entrants in the permit space and ensure that the means used to identify authorized entrants accurately identifies who is in the permit space.
 - iv) Remain outside the permit space during entry operations until relieved by another attendant; NOTE: The attendant may enter a permit space to attempt a rescue if he/she has been trained and equipped for rescue operations and if he/she has been relieved of his/her attendant duties.
 - v) Communicate with authorized entrants as necessary to monitor entrant status and to alert entrants of the need to evacuate the space.
 - vi) Monitor activities inside and outside the space to determine if it is safe for entrants to remain in the space and orders the authorized entrants to evacuate the permit space immediately under any of the following conditions:
 - A) If the attendant detects a prohibited condition;
 - B) If the attendant detects the behavioral effects of hazard exposure in an authorized entrant;
 - C) If the attendant detects a situation outside the space that could endanger the authorized entrants; or
 - D) If the attendant cannot effectively and safely perform all of his/her required duties.
 - E) Attendants monitoring multiple spaces will require entrants in all of the spaces being monitored by that attendant to exit in the event of an emergency affecting one or more of the spaces. Re-entry for each space will follow re-entry procedures set forth in this program, regardless of whether the space was involved in the emergency situation.
 - vii) Summon rescue and other emergency services as soon as the attendant determines that authorized entrants may need assistance to escape from permit space hazards.
 - viii) Take the following actions when unauthorized persons approach or enter a permit space while entry is underway:
 - A) Warn the unauthorized persons that they must stay away from the permit space.
 - B) Advise the unauthorized persons that they must exit immediately if they have entered the permit space.
 - C) Inform the authorized entrants and the entry supervisor if unauthorized persons have entered the permit space.
 - ix) Perform non-entry rescues as specified by the project's or task's rescue procedure.
 - x) Perform no duties that might interfere with the attendant's primary duty to monitor and protect the authorized entrants.

D. Definitions

For the purpose of this program, the following definitions apply:

Acceptable entry conditions means the conditions that must exist in a permit space to allow entry and to ensure that employees involved with a permit-required confined space entry can safely enter into and work within the space.

Attendant means an individual stationed outside one or more permit spaces who monitors the authorized entrants and who performs all attendant's duties assigned in this program.

Authorized entrant means an employee who is authorized to enter a permit space.

Blanking or blinding means the absolute closure of a pipe, line, or duct by the fastening of a solid plate (such as a spectacle blind or a skillet blind) that completely covers the bore and that is capable of withstanding the maximum pressure of the pipe, line, or duct with no leakage beyond the plate.

Company means LG&E AND KU and subsidiaries.

Contractor Proponent means a competent manager's representative designated to carry out the company's supervisory, statutory, and contractual obligations, and to represent the company at the work site.

Confined space means a space that:

- 1) Is large enough and so configured that an employee can bodily enter and perform assigned work; and
- 2) Has limited or restricted means for entry or exit (for example, tanks, vessels, silos, storage bins, hoppers, vaults, and pits are spaces that may have limited means of entry.); and
- 3) Is not designed for continuous employee occupancy.

Double block and bleed means the closure of a line, duct, or pipe by closing and locking or tagging two in-line valves and by opening and locking or tagging a drain or vent valve in the line between the two closed valves.

Emergency means any occurrence (including any failure of hazard control or monitoring equipment) or event internal or external to the permit space that could endanger entrants.

Employee exposure means exposure to a concentration of airborne asbestos fibers that would occur if the employee were not using respiratory protection.

Enclosed space means a working space, such as a manhole, vault, tunnel, or shaft, that has a limited means of egress or entry that is designed for periodic employee entry under normal operating conditions and that under normal conditions does not contain a hazardous atmosphere, but that may contain a hazardous atmosphere under abnormal conditions. **Note:** Spaces that are enclosed but not designed for employee entry under normal operating conditions are not considered to be enclosed spaces for the purposes of this program. Similarly, spaces that are enclosed and that are expected to contain a hazardous atmosphere are not considered to be enclosed spaces for the purposes of this program. Such spaces meet the definition of permit-required confined spaces and entry into them must be performed in accordance with the permit-required confined space entry procedure.

Engulfment means the surrounding and effective capture of a person by a liquid or finely divided (flowable) solid substance that can be aspirated to cause death by filling or plugging the respiratory system or that can exert enough force on the body to cause death by strangulation, constriction, or crushing.

Entry means the action by which a person passes through an opening into a permit-required confined space. Entry includes ensuing work activities in that space and is considered to have occurred as soon as any part of the entrant's body breaks the plane of an opening into the space.

Entry permit means the written or printed document that is created to allow and control entry into a permit space.

Entry supervisor means the person responsible for determining if acceptable entry conditions are present at a permit space where entry is planned, for authorizing entry and overseeing entry operations, and for terminating entry as required by this section. **NOTE:** An entry supervisor may serve as an attendant or as an authorized entrant, as long as that person is trained and equipped as required for each role he or she fills. Also, the duties of entry supervisor may be passed from one individual to another during the course of an entry operation.

Hazardous atmosphere means an atmosphere that may expose employees to the risk of death, incapacitation, impairment of ability to self-rescue (that is, escape unaided from a permit space), injury, or acute illness from one or more of the following causes:

- 1) Flammable gas, vapor, or mist in excess of 10 percent of its lower flammable limit (LFL);
- 2) Airborne combustible dust at a concentration that meets or exceeds its LFL; **NOTE:** This concentration may be approximated as a condition in which the dust obscures vision at a distance of 5 feet (1.52 m) or less.
- 3) Atmospheric oxygen concentration below 19.5 percent or above 23.5 percent;
- 4) Atmospheric concentration of any substance for which a dose or a permissible exposure limit is published in Subpart G, Occupational Health and Environmental Control, or in Subpart Z, Toxic and Hazardous Substances, and which could result in employee exposure in excess of its dose or permissible exposure limit. **NOTE:** An atmospheric concentration of any substance that is not capable of causing death, incapacitation, impairment of ability to self-rescue, injury, or acute illness due to its health effects is not covered by this provision.
- 5) Any other atmospheric condition that is immediately dangerous to life or health. **NOTE:** For air contaminants for which OSHA has not determined a dose or permissible exposure limit, other sources of information, such as Material Safety Data Sheets that comply with the Hazard Communication Standard, section 1910.1200, published information, and internal documents can provide guidance in establishing acceptable atmospheric conditions.

Immediately dangerous to life or health (IDLH) means any condition that poses an immediate or delayed threat to life or that would cause irreversible adverse health effects or that would interfere with an individual's ability to escape unaided from a permit space. **NOTE:** Some materials -- hydrogen fluoride gas and cadmium vapor, for example -- may produce immediate transient effects that, even if severe, may pass without medical attention, but are followed by sudden, possibly fatal collapse 12-72 hours after exposure. The victim "feels normal" from recovery from transient effects until collapse. Such materials in hazardous quantities are considered to be "immediately" dangerous to life or health.

Inerting means the displacement of the atmosphere in a permit space by a noncombustible gas (such as nitrogen) to such an extent that the resulting atmosphere is noncombustible. **NOTE:** This procedure produces an IDLH oxygen-deficient atmosphere.

Isolation means the process by which a permit space is removed from service and completely protected against the release of energy and material into the space by such means as: blanking or blinding; misaligning or removing sections of lines, pipes, or ducts; a double block and bleed system; lockout or tagout of all sources of energy; or blocking or disconnecting all mechanical linkages.

Line breaking means the intentional opening of a pipe, line, or duct that is or has been carrying flammable, corrosive, or toxic material, an inert gas, or any fluid at a volume, pressure, or temperature capable of causing injury.

Non-permit confined space means a confined space that does not contain or, with respect to atmospheric hazards, have the potential to contain any hazard capable of causing death or serious physical harm.

Oxygen deficient atmosphere means an atmosphere containing less than 19.5 percent oxygen by volume.

Oxygen enriched atmosphere means an atmosphere containing more than 23.5 percent oxygen by volume.

Permit-required confined space (permit space) means a confined space that has one or more of the following characteristics:

- 1) Contains or has a potential to contain a hazardous atmosphere;
- 2) Contains a material that has the potential for engulfing an entrant;
- 3) Has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly converging walls or by a floor which slopes downward and tapers to a smaller cross-section; or
- 4) Contains any other recognized serious safety or health hazard.

Permit system means the written procedure for preparing and issuing permits for entry and for returning the permit space to service following termination of entry.

Prohibited condition means any condition in a permit space that is not allowed by the permit during the period when entry is authorized.

Rescue service means the personnel designated to rescue employees from permit spaces.

Retrieval system means the equipment (including a retrieval line, chest or full-body harness, wristlets, if appropriate, and a lifting device or anchor) used for non-entry rescue of persons from permit spaces.

Testing means the process by which the hazards that may confront entrants of a permit space are identified and evaluated. Testing includes specifying the tests that are to be performed in the permit space. **NOTE:** Testing enables both the creation and implementation of adequate control measures for the protection of authorized entrants and to determine if acceptable entry conditions are present immediately prior to, and during, entry.

II. PROGRAM ELEMENTS

A. Workplace Spaces Evaluation

- 1) Each workplace shall be evaluated to determine if confined spaces and permit-required confined spaces are present. *Appendix A, Permit-Required Confined Space Decision Flowchart*, may be used to assist in this evaluation.
- 2) When there are changes in the use or configuration of a non-permit confined space that might increase the hazards to entrants, the employer shall reevaluate that space and, if necessary, reclassify it as a permit-required confined space.

B. Confined Spaces Assessment

- 1) Confined spaces shall be assessed prior to entry to determine the appropriate entry procedures.
- 2) *Appendix B, Confined Space Assessment Checklist*, may be used to assist in assessing the hazards within a confined space. Due to the nature and types of spaces present in our workplaces, it is impossible to define all of the potential hazards that may be present in a given space. Therefore, questions concerning a potential hazard should be referred to the appropriate supervisor and/or health and safety specialist.

C. Communication of Hazards

- 1) Notification to Employees and Contractors

- a) If a workplace contains permit-required confined spaces, danger signs shall be posted or an alternative method for warning employees and contractor employees of the existence, location, and hazards of the spaces shall be provided.
- b) Danger signs shall be posted at such a distance and from such a location that an employee may read the signs and take necessary protective steps before entering the area marked by the signs.
- c) The danger signs shall bear the following information or other similar language:

DANGER

PERMIT REQUIRED CONFINED SPACE

DO NOT ENTER

2) Confined Space Permits

- a) Prior to entry into permit-required confined spaces, monitoring to determine that acceptable entry conditions exist shall be performed and the permit shall be completed and signed by the entry supervisor and reviewed and signed by the attendant(s) and entrant(s).
- b) Entrants and their authorized representatives shall be provided an opportunity to observe all pre-entry and subsequent monitoring of permit spaces.
- c) When a permit is required for entry into a space, the permit shall be conspicuously placed near the entrance to the space.
- d) The entry supervisor shall terminate the entry and cancel the entry permit when:
 - i) The entry operations covered by the entry permit have been completed, or
 - ii) A condition that is not allowed under the entry permit arises in or near the permit space.
- e) The duration of the permit may not exceed the time required to complete the assigned task or job identified on the permit
- f) The BU or facility may elect to use their own permits and allow contractors to use their own permits, as long as the documentation is equivalent to the example permit in *Appendix C*. Blank electronic copies of this document can be found on the corporate webpage under “Non HR forms.”

3) Training

- a) All employees and contractors shall be informed of the presence of confined spaces within the workplace and the need to be properly trained before entry is allowed. This training may be provided during the site orientation or project job briefing. It shall be stressed during this training that unauthorized individuals shall be prohibited from entering confined spaces for any reason.
- b) Entry supervisors, entrants and attendants shall be provided training to establish proficiency in their assigned duties prior to or at the time of initial assignment and at least annually thereafter.
- c) Employees assigned to be rescue personnel shall be provided training to perform assigned rescue duties. At a minimum the training shall include:
 - i) Authorized entrant training,
 - ii) Certified first aid and cardiopulmonary resuscitation training, and
 - iii) Annual hands-on, simulated permit space rescues from representative spaces.

NOTE: Representative spaces shall, with respect to size, configuration, and accessibility, simulate the types of permit spaces from which rescues are to be performed.

4) Summoning Rescue and Emergency Personnel

- a) Business Units or facilities shall develop procedures for summoning rescue and emergency personnel.
- b) Prior to entry into a permit space, rescue and emergency personnel shall be notified of the planned entry and pertinent information about the entry, such as the nature of the work and the expected duration of the work to be performed.

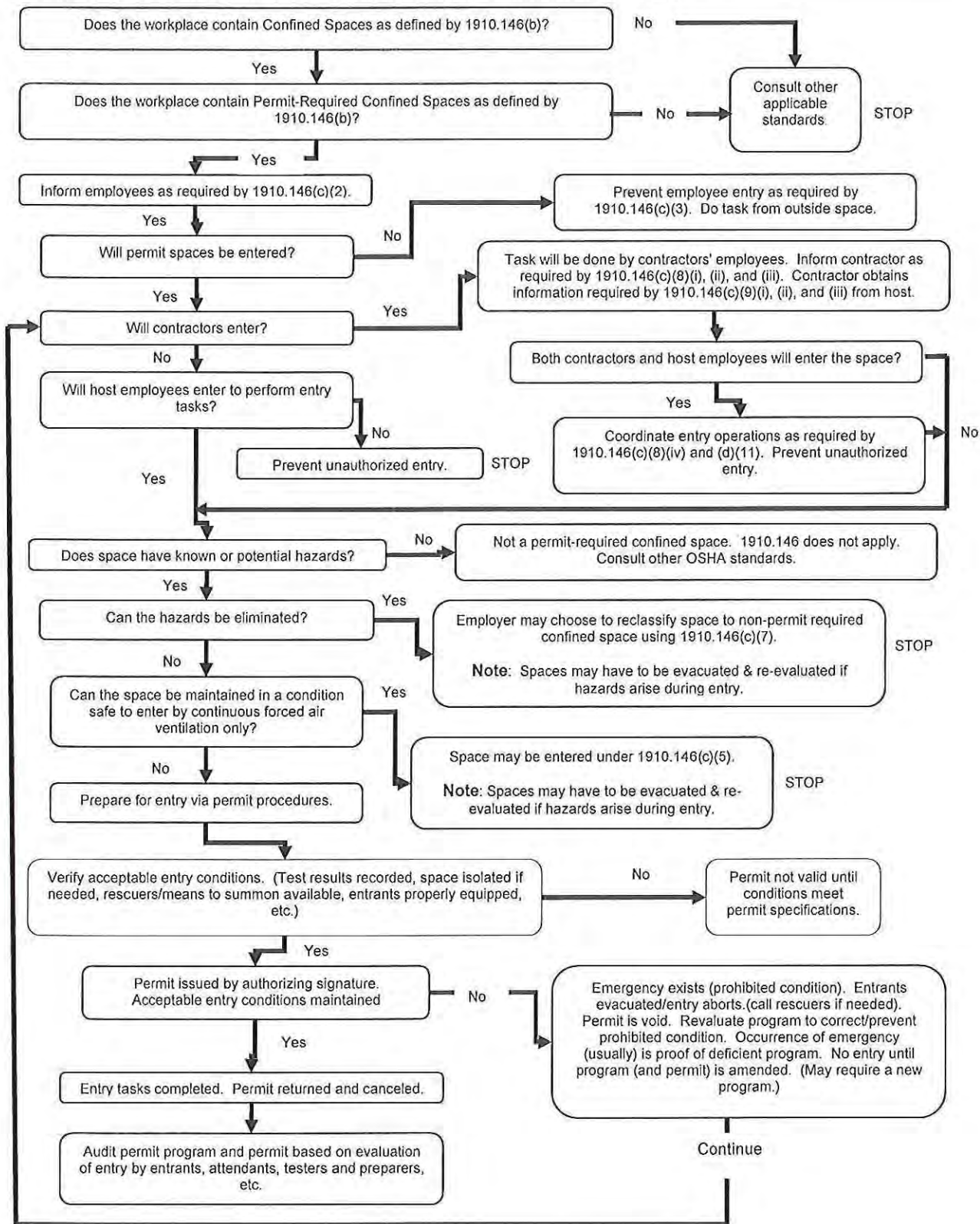
- c) Equipment necessary for summoning rescue and emergency personnel shall be readily available to the attendant throughout the duration of the entry.

- 5) When employees and contractors or multiple contractors' employees are working simultaneously in the same permit-required confined space, a plan shall be developed and implemented for coordinating the work in the space as well as for attending the space and providing rescue and emergency services.

- 6) Recordkeeping
 - a) Confined Space Entry Permits
 - i) Once a permit is cancelled, the permit and all documents related to it shall be given to the Health and Safety Specialist/Safety/Technical Training Consultant.
 - ii) Cancelled permits shall be maintained for no less than one year.
 - b) Determinations and supporting documentation for using any of the alternate entry procedures identified in this written program shall be maintained for at least one year.
 - c) Training records
 - i) Certification of training shall be documented for each authorized entry supervisor, entrant, and attendant. The certification shall include the employee's name, the signature or initials of each trainer, and the date(s) of training.
 - ii) Training certification documents shall be retained for no less than five years.

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Appendix A: Permit-Required Confined Space Decision Flow Chart



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Appendix B: Confined Space Assessment Checklist

	Yes	No
Is the space a confined space?	_____	_____
What hazards, if any, are present within the space?	_____	_____
Hazardous atmosphere?	_____	_____
Oxygen deficient?	_____	_____
Oxygen enriched?	_____	_____
Flammable or explosive?	_____	_____
Toxic? - List:	_____	_____
Engulfment?	_____	_____
Hazardous Energy?	_____	_____
Mechanical?	_____	_____
Electrical?	_____	_____
Hydraulic?	_____	_____
Pneumatic?	_____	_____
Chemical?	_____	_____
Thermal?	_____	_____
Other? (describe)	_____	_____
Physical Hazards?	_____	_____
Wet or otherwise slippery surfaces?	_____	_____
Falls >4 feet?	_____	_____
Entrapment?	_____	_____
Sharp objects?	_____	_____
Inadequate lighting?	_____	_____
Other? (describe)	_____	_____
Other Hazards? (describe)	_____	_____
Is the confined space a permit-required confined space?	_____	_____
Can the hazard(s) be eliminated? If yes, see Appendix E.	_____	_____
If the only hazard posed by the space is an actual or potential hazardous atmosphere, will continuous forced air ventilation alone be sufficient to maintain safe entry conditions? If yes, see Appendix D.	_____	_____
Does the confined space meet the definition of an enclosed space? If yes, see Appendix F.	_____	_____
Can entrance covers be removed safely?	_____	_____
Are entrances properly protected to prevent unauthorized entry?	_____	_____
For vertical entry spaces, are guards/barriers in place to prevent objects and people from falling into the space?	_____	_____

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Appendix C: Example Confined Space Entry Permit

Confined Space Entry Permit

Is this space Permit Required? _____ Yes _____ No

SECTION A: GENERAL INFORMATION													
1. Plant/Unit				2. W.O. #				3. E.I.D. #					
4. Space #				5. Space Desc.									
6. Location													
7. Work To Be Performed in Space													
8. Recognized and potential Hazard(s)													
9. Supervisor(s) of Work Activity						10. Issue Date/Time			11. Exp. Date/Time				
12. Attendant(s) Name(s)				13. Entrant(s) Names									
a.		a.		d.		g.							
b.		b.		e.		h.							
c.		c.		f.		i.							
SECTION B: AIR MONITORING EQUIPMENT USED													
14. Make/Model(s)			15. ED. #(s)			16. Date(s) Used			17. Annual Cal. Date				
a.													
b.													
c.													
d.													
SECTION C: AIR TESTING RECORD						18. Field Cal. <input type="checkbox"/>		18a. Cal. By					
19. Contaminants		20. Permissible		Reading	Date	Reading	Date	Reading	Date	Reading	Date		
a. % Oxygen O2		19.5% to 23.5%											
b. % LEL		Less than 10%											
c. Carbon Monoxide CO		Less than 35 ppm											
d. Hydrogen Sulfide H2S		Less than 10 ppm											
e. Sulfur Dioxide SO2		Less than 2 ppm											
f. Other													
g. Readings taken by who (initials)													
SECTION D: EQUIPMENT NECESSARY TO PERFORM AUTHORIZED ENTRY													
21. Personal Protective Equipment <small>(Write specifics on back of permit)</small>			Required		Present		22. Other Equipment <small>(verify specifics on back)</small>			Required		Present	
			No	Yes	No	Yes				No	Yes	No	Yes
a. Protective clothing							a. Lighting						
b. Head protection							b. Spark-proof tools						
c. Hand protection							c. Portable ventilation						
d. Foot protection							d. Barrier/sign/posting						
e. Hearing protection							e. Fire extinguisher						
f. Respiratory pro/type							f. Retrieval equipment						
g. Eye protection							g. Communication						
h. Fall protection							h. Fall protection						
23. Rescue/How to Summon													
SECTION E: OTHER ELEMENTS NECESSARY FOR AUTHORIZED ENTRY													
24. Element				Required		Performed		25. Comments:					
				No	Yes	No	Yes						
a. Hot work permit													
b. Operating-card/de-energized													
c. Material lines blocked, blanked, capped													
d. Space drained, emptied-contents removed													
26. If space is evacuated explain why in #25													
27. SIGNATURE OF AUTHORIZING OFFICIAL: _____								28. DATE _____					

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21. PERSONAL PROTECTIVE EQUIPMENT (write type of equipment used and specifics.)

22. OTHER EQUIPMENT (write type of equipment used and specifics.)

Handwritten initials/signature

Appendix D: Alternate Procedure for Entering a Permit-Required Confined Space with Hazardous Atmosphere Potential Only

Use of this alternate procedure must be approved by the Business Unit's Safety Manager

- A. When the following conditions are met, trained personnel may enter a permit-required confined space without following the procedures outlined in Section II of the corporate Permit-Required Confined Space Program.
- 1) It can be demonstrated that the only hazard posed by the permit space is an actual or potential hazardous atmosphere;
 - 2) It can be demonstrated that continuous forced air ventilation alone is sufficient to maintain that permit space safe for entry;
 - 3) Previous monitoring and inspection data that supports these demonstrations.
 - 4) If an initial entry of the permit space is necessary to obtain the data required to show that the only hazard posed by the space is an actual or potential hazardous atmosphere, the entry is performed in compliance with Section II of the corporate Permit-Required Confined Space Program.
 - 5) The determinations and supporting data required for this type of alternate entry shall be documented and the documentation shall be made available to each person who enters the permit space or to their authorized representative; and
- B. To use this alternate procedure, entry into the permit space must be performed in accordance with these requirements.
- 1) Use of this alternate procedure must be approved by the Business Unit's Health and Safety Manager.
 - 2) Any conditions making it unsafe to remove an entrance cover shall be eliminated before the cover is removed.
 - 3) When entrance covers are removed, the opening shall be promptly guarded by a railing, temporary cover, or other temporary barrier that will prevent an accidental fall through the opening and that will protect each employee working in the space from foreign objects entering the space.
 - 4) Before an employee enters the space, the internal atmosphere shall be tested, with a calibrated direct-reading instrument, for oxygen content, for flammable gases and vapors, and for potential toxic air contaminants, in that order.
 - 5) Any person who enters the space, or their authorized representative, shall be provided an opportunity to observe the required pre-entry testing.
 - 6) There may be no hazardous atmosphere within the space whenever anyone is inside the space.
 - 7) Continuous forced air ventilation shall be used, as follows:
 - ii) No one may enter the space until the forced air ventilation has eliminated any hazardous atmosphere;
 - iii) The forced air ventilation shall be so directed as to ventilate the immediate areas where a person is or will be present within the space and shall continue until all personnel have left the space;
 - iv) The air supply for the forced air ventilation shall be from a clean source and may not increase the hazards in the space.

- v) The atmosphere within the space shall be periodically tested as necessary to ensure that the continuous forced air ventilation is preventing the accumulation of a hazardous atmosphere. Any person, who enters the space, or their authorized representative, shall be provided with an opportunity to observe the required periodic testing.
- vi) If a hazardous atmosphere is detected during entry:
 - i) Each entrant shall leave the space immediately;
 - ii) The space shall be evaluated to determine how the hazardous atmosphere developed; and
 - iii) Measures shall be implemented to protect entrants from the hazardous atmosphere before any subsequent entry takes place.
- C. The entry supervisor shall verify that the space is safe for entry and that the pre-entry measures required by this alternate procedure have been taken, through a written certification that contains the date, the location of the space, and the signature of the person providing the certification. The certification shall be made before entry and shall be made available to each employee entering the space or to that employee's authorized representative.

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Appendix E: Alternate Procedure for Reclassifying a Permit-Required Confined Space

Use of this alternate procedure must be approved by the Business Unit's Safety Manager

A space classified as a permit-required confined space may be reclassified as a non-permit confined space under the following procedures:

- 1) If the permit space poses no actual or potential atmospheric hazards and if all hazards within the space are eliminated without entry into the space, the permit space may be reclassified as a non-permit confined space for as long as the non-atmospheric hazards remain eliminated.
- 2) If it is necessary to enter the permit space to eliminate hazards, such entry shall be performed in compliance with Section II of the corporate Permit-Required Confined Space Program. If testing and inspection during that entry demonstrate that the hazards within the permit space have been eliminated, the permit space may be reclassified as a non-permit confined space for as long as the hazards remain eliminated.

NOTE: Control of atmospheric hazards through forced air ventilation does not constitute elimination of the hazards. *Appendix D* covers permit space entry where it can be demonstrated that forced air ventilation alone will control all hazards in the space.

- 3) Documentation of the basis for determining that all hazards in a permit space have been eliminated shall be maintained. This documentation will include a certification that contains the date, the location of the space, and the signature of the person making the determination. The certification shall be made available to each entrant of the space or to their authorized representative.
- 4) If hazards arise within a permit space that has been declassified to a non-permit space under this alternate procedure, each entrant in the space shall exit the space. The space shall then be reevaluated to determine whether it must be reclassified as a permit space, in accordance with other applicable provisions of this program.

Appendix F: Alternate Procedure for Entering Enclosed Spaces

Use of this alternate procedure must be approved by the Business Unit’s Safety Manager

A. Application

This alternate procedure covers entries into enclosed spaces. It does not apply to vented vaults if a determination is made that the ventilation system is operating to protect entrants before they enter the space. This alternate procedure applies to routine entry into enclosed spaces in lieu of the permit-required confined space entry requirements. If, after the precautions given in this alternate procedure are taken, the hazards remaining in the enclosed space endanger the life of an entrant or could interfere with escape from the space, then entry into the enclosed space shall meet the permit-required confined space entry requirements of the corporate program.

Note: Entries into enclosed spaces conducted in accordance with the permit-required confined space entry program are considered as complying with this alternate procedure.

- B. The use of safe work practices for entry into and work in enclosed spaces and for rescue of entrants from such spaces must be maintained and followed.
- C. Entrants into enclosed spaces and those who serve as attendants shall be trained in the hazards of enclosed space entry, in enclosed space entry procedures, and in enclosed space rescue procedures.
- D. Equipment to ensure the prompt and safe rescue of entrants from the enclosed space shall be provided and readily available during entries.
- E. Enclosed Space Entry Procedure

1) Removing Entrance Covers

- a) Before any entrance cover to an enclosed space is removed, the entry supervisor shall determine whether it is safe to do so by checking for the presence of any atmospheric pressure or temperature differences and by evaluating whether there might be a hazardous atmosphere in the space. Any conditions making it unsafe to remove the cover shall be eliminated before the cover is removed.

Note: This evaluation may take the form of a check of the conditions expected to be in the enclosed space. For example, the cover could be checked to see if it is hot and, if it is fastened in place, could be loosened gradually to release any residual pressure. A determination must also be made of whether conditions at the site could cause a hazardous atmosphere, such as an oxygen deficient or flammable atmosphere, to develop within the space.

- b) When covers are removed from enclosed spaces, the opening shall be promptly guarded by a railing, temporary cover, or other barrier intended to prevent an accidental fall through the opening and to protect entrants working in the space from objects entering the space.

2) Atmospheric Testing of Enclosed Spaces

- a) Entrants may not enter any enclosed space while it contains a hazardous atmosphere, unless the entry conforms to the corporate permit-required confined space program.
- b) Test instruments used to monitor atmospheres in enclosed spaces shall be kept in calibration, with a minimum accuracy of + or - 10 percent.

- c) Before an entrant enters an enclosed space, the internal atmosphere shall be tested for oxygen deficiency with a direct-reading meter or similar instrument, capable of collection and immediate analysis of data samples without the need for off-site evaluation. If continuous forced air ventilation is provided, testing is not required provided that the procedures used ensure that employees are not exposed to the hazards posed by oxygen deficiency.
 - d) Before an entrant enters an enclosed space, the internal atmosphere shall be tested for flammable gases and vapors with a direct-reading meter or similar instrument capable of collection and immediate analysis of data samples without the need for off-site evaluation. This test shall be performed after the oxygen testing and ventilation required by 2) c) of this alternate procedure demonstrate that there is sufficient oxygen to ensure the accuracy of the test for flammability.
 - e) If flammable gases or vapors are detected or if an oxygen deficiency is found, forced air ventilation shall be used to maintain oxygen at a safe level and to prevent a hazardous concentration of flammable gases and vapors from accumulating. A continuous monitoring program to ensure that no increase in flammable gas or vapor concentration occurs may be followed in lieu of ventilation, if flammable gases or vapors are detected at safe levels.
 - f) If continuous forced air ventilation is used, it shall begin before entry is made and shall be maintained long enough to ensure that a safe atmosphere exists before entrants are allowed to enter the work area. The forced air ventilation shall be so directed as to ventilate the immediate area where entrants are present within the enclosed space and shall continue until all entrants leave the enclosed space.
 - g) The air supply for the continuous forced air ventilation shall be from a clean source and may not increase the hazards in the enclosed space.
 - h) If open flames are used in enclosed spaces, a test for flammable gases and vapors shall be made immediately before the open flame device is used and at least once per hour while the device is used in the space. Testing shall be conducted more frequently if conditions present in the enclosed space indicate that once per hour is insufficient to detect hazardous accumulations of flammable gases or vapors.
- 3) Attendants
- a) While work is being performed in the enclosed space, a person with first aid training shall be immediately available outside the enclosed space to render emergency assistance if there is reason to believe that a hazard may exist in the space or if a hazard exists because of traffic patterns in the area of the opening used for entry. That person is not precluded from performing other duties outside the enclosed space if these duties do not distract the attendant from monitoring employees within the space.
 - b) While work is being performed in a manhole containing energized electric equipment, an employee with first aid and CPR training meeting paragraph (b)(1) of this section shall be available on the surface in the immediate vicinity to render emergency assistance.
 - c) Reliable communications, through two-way radios or other equivalent means, shall be maintained among all employees involved in the job.

CRITICAL LIFT PLAN

Location:	Date of Lift:
Load Description:	
Lift Description:	

LOAD

Weight of Load _____ lbs.
 Weight of Aux. Block _____ lbs.
 Weight of Main Block _____ lbs.
 Weight of Lifting Beam _____ lbs.
 Weight of Slings/Shackles _____ lbs.
 Weight of Jib (erected/stowed) _____ lbs.
 Weight of Hoist Rope (extra) _____ lbs.
 Other? _____ lbs.

Gross Load	lbs.
------------	------

Source of Load Weight Info (Drwgs, Calcs, etc.) _____

Load Weight Confirmed by: _____

CRANE

Type of Crane _____
 Max Crane Capacity _____
 Boom Length at Pickup _____ ft. Boom Length at Set-down _____ ft.
 Radius at Pickup _____ ft. Set-down _____ ft.
 Angle at Pickup _____ ° Set-down _____ °
 Crane Gross Capacity at Pickup _____
 Crane Gross Capacity at Set-down _____
 Lowest Gross Capacity for this lift is _____ lbs.
 Gross load on crane is _____ lbs.
 Lift is _____ % of the crane's rated capacity
 (% = Gross Load divided by Gross Capacity)

JIB

Erected _____ Stowed _____
 If Jib to be used: Length _____ Angle _____
 Rated capacity of Jib from chart _____ lbs.

HOIST ROPE

Rope diameter _____ Number of parts _____
 Lift capacity based on parts _____ lbs.

RIGGING

Hitch type _____
 No. of slings _____ Size _____ Type _____
 Sling assembly rated capacity _____ lbs.
 Shackle size _____ No. of shackles _____
 Shackle rated capacity _____ lbs.

CRANE PLACEMENT

Deviation from smooth solid foundation? Yes / No
 If Yes describe measures to be taken _____

High voltage or electrical hazards? Yes / No
 If Yes list line voltage _____
 If Yes, then a "Mobile Crane Power Line Clearance Worksheet" must be completed

Obstacles/obstructions to lift or swing? Explain. _____

Travelling with load (Pick and Carry)? Yes / No

Swing direction? _____

PRE-LIFT CHECKLIST – Completed Prior To Lift

- | | |
|---|---|
| <input type="checkbox"/> Crane inspected | <input type="checkbox"/> Rigger qualified |
| <input type="checkbox"/> Rigging inspected | <input type="checkbox"/> Signal system |
| <input type="checkbox"/> Crane setup | <input type="checkbox"/> Tag lines |
| <input type="checkbox"/> Swing room | <input type="checkbox"/> Wind/Temp. |
| <input type="checkbox"/> Hoist Height | <input type="checkbox"/> Designated spotter |
| <input type="checkbox"/> Head room | <input type="checkbox"/> Traffic |
| <input type="checkbox"/> Operator qualified | <input type="checkbox"/> Site control |
| <input type="checkbox"/> Signatures | |

NOTES/COMMENTS

Supervisor Signature _____ Date _____

Crane Operator Signature _____ Date _____

Signalperson Signature _____ Date _____

Handwritten initials/signature

Mobile Crane Power Line Clearance Worksheet (up to 350kV)

A hazard assessment of this jobsite has shown that the crane being used, **if operated up to its maximum radius**, could encroach within 20 feet of a power line. If so, the following measures must be employed.

Check Option 1, 2 or 3 and follow the procedures for the Option selected

- Option 1: The line(s) are de-energized and visibly grounded at the worksite. No further action required.
- Option 2: 20 foot clearance. Ensure that no part of the equipment, load line or load (including rigging and lifting accessories) gets closer than 20 feet to the power line by implementing the measures specified below.
- Option 3: Determine the line's voltage and minimum approach distance permitted under Table A (see page 2). Determine if any part of the load line or load (including rigging and lifting accessories) **while operating up to the equipment's maximum working radius** in the work zone, could get closer than the minimum approach distance of the power line permitted under Table A. If so, then the procedures listed below must be implemented.

If applying Option 2 or 3, the following requirements must be met and checked off:

- A planning meeting has been held with the operator and all workers who will be in the area to review the location of the power line(s) and the steps that will be implemented to prevent encroachment/electrocution.
- If tag lines are to be used, they are non-conductive
- An elevated warning line, barricade, or line of signs, in view of the operator has been erected, equipped with flags or similar high-visibility markings, at 20 feet from the power line (if using Option (2) of this section) or at the minimum approach distance under Table A (if using Option 3). If the operator is unable to see the elevated warning line, a dedicated spotter must be used.

If using a dedicated spotter, then the following procedures are required.

- The dedicated spotter is equipped with a visual aid to assist in identifying the minimum clearance distance. Examples include but are not limited to: a clearly visible line painted on the ground; a clearly visible line of stanchions; a set of clearly visible landmarks (such as a fence post behind the spotter and a building corner ahead of the spotter).
- The dedicated spotter is positioned to effectively gauge the clearance distance.
- Where necessary, the dedicated spotter has equipment that enables the spotter to communicate directly with the operator.
- The dedicated spotter can give timely information to the operator so that the required distance can be maintained.
- If a spotter is required then at least one of the following measures must be implemented. Check which one of the following measures will be utilized.
 - A proximity alarm set to give the operator sufficient warning time to prevent encroachment.
 - A device that automatically warns the operator when to stop movement such as a range control warning device set to give the operator sufficient warning time to prevent encroachment.
 - A device that automatically limits range of movement, set to prevent encroachment.
 - An insulating link/device installed at a point between the end of the load line (or below) and the load.

Documentation of Planning Meeting		
Printed Name	Signature	Date

Table A – Minimum Clearance Distances	
Voltage (nominal, kV, alternating current)	Minimum Clearance distance (feet)
Up to 50	10
Over 50 to 200	15
Over 200 to 350	20
Over 350 to 500	25
Over 500-750	35
Over 750 to 1000	45
Over 1000	(as established by utility owner)

After completion of work, this form shall be sent to the designated LG&E/KU Health and Safety Specialist/Consultant for review and retention.

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