EVERSOURCE

Supplement Authorization Form

Project Title: [redacted] Reconductoring	**Project Number: CD01946**
Date Prepared: 04/09/2025	**Company:** Eversource CT
Organization: Distribution Engineering	**Project Category:** TRMSN DISTR RELIABILTY PERFRM
Initiating Organization: Distribution	**Project Type:** Specific
Project DDE: [redacted]	**Capital Investment part of 5-year plan?** Yes
Project Manager: [redacted]	**Emergency Related Request?** No
Project Sponsor: [redacted]	**Facility Type** (check all that apply): ☐ PTF ☐ non-PTF ☒ Distribution ☐ N/A (General Plant)
Current Authorized Amount: $641K	**Approved In-Service Date:** 12/31/2024
Supplement Request: $741K	**Estimated In-Service Date:** 5/31/2025
Total Capital Request: $1,382K	**Authorization Type: Supplement Request**
	Reason: Cost Overage

1. Project Background

The current authorized amount for CD01946 is **$641K.** A supplemental authorization of **$741K** is requested to meet the total capital request of **$1,382K,** or 216% of Full Funding estimate.

This project is being established to address the recurring outages on [redacted] in Mansfield. This [redacted] served by this trip saver that have experienced nine outages in four years, all tree related.

This circuit was last trimmed in the 2022 and is scheduled for trimming in 2026. The majority of the poles are over 50 years old and in need of replacement.

This area's infrastructure is a 13.8KV circuit with 11,050 ft of #2 ACSR or #631 COMP bare wire on ridge pins. There are multiple splices along most spans that need to be addressed.

In conjunction with tree trimming, project CD01946 proposes to reconductor the existing 11,050 ft of bare wire with single phase 336 TW with ridge pin construction from pole 1808 to pole 1500 on Wormwood Hill Rd.

2. Supplement Justification Overview

Additional funding is requested with a primary driver being increased labor costs.

The labor hours in the Full Funding estimate were 739.9 hours and the actual labor hours is 3132.5, an increase of 422%. 20% of the labor time was for job site travel. Internal crews' travel time to job site was 30+ miles.

Additionally, the tree trimming estimate was $69k more than the Full Funding estimate.

Lastly, costs of materials increased due to supply shortages and inflation, resulting in an increase to the total project.

3. Supplement Justification Detail

The direct costs for the Supplemental Funding estimate are 116% more than the Full Funding estimate, requiring a supplemental funding request.

4. Supplement Cost Summary (Project Total)

Line-item Category	To Date Spend Year(s)	Prior Authorized Year(s)	Variance (Supplemental Request) Year(s)	New Total Request (Add Prior Authorized and Variance) Year(s)
Internal Labor and Construction Equipment	$103.9	$43.9	$142.3	$186.2
Outside Services	$61.5	$177.4	$15.7	$193.1
Materials	$35.8	$47.3	$14.5	$61.8
Removals	$0.0	$35.2	$20.3	$55.5
Risk and Contingency	$0.0	$44.7	$-5.3	$39.4
Other	$9.9	$0.0	$13.6	$13.6
SUBTOTAL DIRECTS W/ RISKS	**$211.1**	**$348.5**	**$201.0**	**$549.5**
Indirect / Overhead (including benefits)	$367.1	$292.5	$533.8	$826.3
AFUDC	$3.2	$0.0	$6.2	$6.2
Subtotal – Indirect Costs	**$370.3**	**$292.5**	**$540.1**	**$832.6**
TOTAL CAPITAL REQUEST	**$581.3**	**$641.0**	**$741.1**	**$1,382.1**
Reimbursables/Customer Contribution	$0.0	$0.0	$0.0	$0.0
PROJECT TOTAL (LESS REIMBURSABLES)	**$581.3**	**$641.0**	**$741.1**	**$1,382.1**

New Total Request by Year (if applicable)

Note: If multi-year project, include actuals for current and years past, and then show forecasted spend for upcoming years.

Line item Category	Year 2024	Year 2025	Total
Internal Labor and Construction Equipment	$0.0	$186.2	$186.2
Outside Services	$0.0	$193.1	$193.1
Materials	$26.2	$40.1	$61.8
Removals	$0.0	$51.0	$55.5
Risk and Contingency	$0.0	$39.4	$39.4
Other	$0.0	$13.6	$13.6
SUBTOTAL DIRECTS W/ RISKS	**$26.3**	**$523.3**	**$549.5**
Indirect / Overhead (including benefits)	$8.3	$818.0	$826.3
AFUDC	$0.1	$6.2	$6.2
Subtotal – Indirect Costs	**$8.4**	**$824.2**	**$832.6**
TOTAL CAPITAL REQUEST	**$34.6**	**$1,347.5**	**$1,382.1**
Reimbursables/Customer Contribution	$0.0	$0.0	$0.0
PROJECT TOTAL (LESS REIMBURSABLES)	**$34.6**	**$1,347.5**	**$1,382.1**

5. Lessons Learned

N/A

EVERSOURCE

Supplement Authorization Form

Project Title: [redacted] Reconductoring	Project Number: CD01946
Date Prepared: 01/14/2025	**Company:** Eversource CT
Organization: Distribution Engineering	**Project Category:** TRMSN DISTR RELIABILTY PERFRM
Project Initiator: [redacted]	**Project Type:** Specific
Initiating Organization: Distribution	**Capital Investment part of original Op Plan:** Yes
Project Manager: [redacted]	**Emergency Related Request?** No
Project Sponsor: [redacted]	**Facility Type** (check all that apply): ☐ PTF ☐ non-PTF ☒ Distribution ☐ N/A (General Plant)
Required in service date: 12/31/2025	
Total Capital Request: $641K	**Authorization Type:** Full Funding

1. Executive Summary

Full funding is being requested for $641K which is 106% of the partial funding estimate of $605K. CD01946 was partially approved on 3/31/2022. There is no scope change on the project. This project falls within the 15% threshold relative to the partial funding estimate and is being requested with no further changes anticipated.

The original project was presented as follows:

This project is being established to address the recurring outages on [redacted] in Mansfield. This [redacted] There are [redacted] customers served by this trip saver that have experienced nine outages in the last four years with all of them being tree related.

This circuit was last trimmed in the 2018 but is scheduled for trimming in 2022. The majority of the poles are over 50 years old and in need of replacement.

This area's infrastructure is a 13.8KV circuit with 11,050 ft of #2 ACSR or #631 COMP bare wire on ridge pins. There are multiple splices along most spans that need to be addressed.

In conjunction with tree trimming, project CD01946 proposes to reconductor the existing 11,050 ft of bare wire with single phase 336 TW with ridge pin construction from pole 1808 to pole 1500 on [redacted]

In addition, this project will also be moving an open point on this lateral to an alternate feed.

6. Project Cost Summary

Note: Dollar values are in thousands.

Capital Costs	2025	2026	Year 3+	Total
Internal Labor and Construction Equipment	43.9	0.0	0.0	43.9
Outside Services	177.4	0.0	0.0	177.4
Materials	47.3	0.0	0.0	47.3
Removals	35.2	0.0	0.0	35.2
Risk and Contingency	44.7	0.0	0.0	44.7
Other	0.0	0.0	0.0	0.0
Subtotal	**348.5**	**0.0**	**0.0**	**348.5**

Indirect Capital Costs	2025	2026	Year 3+	Total
Indirects/Overheads (including benefits)	292.5	0.0	0.0	292.5
Capitalized interest or AFUDC, if any	0.0	0.0	0.0	0.0
Subtotal	**292.5**	**0.0**	**0.0**	**292.5**
Total Capital Costs (Gross)	**641.0**	**0.0**	**0.0**	**641.0**
Less Total Customer Contribution	**0.0**	**0.0**	**0.0**	**0.0**
Project Costs (Net of Reimbursement)	**641.0**	**0.0**	**0.0**	**641.0**

7. Technical Justification

Background, Project Need/Justification, and Project Scope

a. Background

Outage History

Formally the trip saver was named 1P_RR: 1808:12J5-1600F, with nomenclature being obsolete as of this full funding request.

Year	Duration(min)	Cause Type	Weather	Storm	Pole number
2019	190	Tree Related	High Winds	FALSE	1P_RR: 1808
2019	86	Tree Related	Normal Weather	FALSE	1P_RR: 1808
2019	119	Vines	Normal Weather	FALSE	1P_RR: 1808
2019	270	Tree Related	High Winds	TRUE	1P_RR: 1808
2020	107	Tree Related	Normal Weather	FALSE	1P_RR: 1808
2020	77	Tree Related	Thunderstorm	FALSE	1P_RR: 1808
2020	5670	Tree Related	High Winds	TRUE	1P_RR: 1808
2021	73	Tree Related	Normal Weather	FALSE	1P_RR: 1808
2022	195	Tree Related	High Winds	FALSE	1P_RR: 1808

Total Customer Minutes: 288,460
Total Customer Interruptions: 1,064
Total Number of Events: 9
Customer Interruptions Saved: 133
Cost Per Cust. Intr. Saved: 4,645.69
Customer Minutes Saved: 32,452
Cost Per Cust. Min. Saved: 19.04

b. Project Need

This project was established to address frequent outages on [redacted] in Mansfield, CT which impact [redacted] customers. There have been 9 outages in the last four years with five of them being in the last two years.

As a result of that, this project will replace 11,050 ft of bare wire with 336 TW. With additional expected tree trimming in 2022, this will help increase reliability and avoid future outages in this area.

c. Project Scope

The scope of this project is as follows:



- Remove hazard trees.

Major Material:

- 11,050 ft. Single Phase 336 Tree Wire
- 52 Poles
- 3 Single Phase Radial Reclosers

8. Alternatives Considered

No alternatives were considered for this project.

9. Project Schedule

Add any additional milestones that are pertinent to the project

Milestone/Phase Name	Estimated Date
Partial Approval	March 2022
100% Detailed Engineering Completion	November 2023
Fully Funded	January 2025
In Service Date	December 2025

10. Regulatory Decisions

N/A

11. Codes and Standards

N/A

12. Risk and Contingencies

Risk Mitigation:

Risk Event	Risk Horizon	Likelihood of Occurrence	Risk Mitigation
Actual cost higher than estimated due to scope changes.	2025	Medium	Included contingency costs in the funding request. Perform detailed Field Analysis and walk down in project development to avoid potential issues.
Customer Permission / Siting Council / Municipal approvals	2025	Low	Design to minimize customer impact. Project Preplanning and customer/community outreach
Internal construction resources not available to perform the work.	2025	High	Plan internal resources to perform the work. Use competitive bidding to ensure lowest outside labor cost.
Internal engineering resources not available to perform the work.	2024	Medium	Plan internal resources to perform the work. Use competitive bidding to ensure lowest outside labor cost.

Storm delays	2025	Medium	If storm activity delays work, we may be forced to use external resources.

13. References

1. N/A

14. Attachments (One Line Diagrams, Images, etc.)

Attachment	Included in Submittal?
A1. Partial Funding PAF	*YES*
A. Cost Estimate	*YES*
B. System and Station One-Lines	*YES*
C. Geographic Map	*YES*

A1 – Partial Funding PAF:

Operations Project Authorization Form

Project Title [redacted] **Reconductoring PAF**	**Project Number: CD01946**
Date Prepared: 03/31/2022	**Company:** Eversource CT
Organization: EFO	**Class(es) of Plant:** D Line
Project Initiator: [redacted]	**Project Category: Reliability**
Project Manager: [redacted]	**Project Type:** Specific
Project Sponsor: [redacted]	**Capital Investment part of original Operating Plan:** Yes
Estimated in service date: 12/31/2024	**Emergency Related Request?** Yes
Eng./Constr. Resources Budgeted? Yes	**Facility Type** (check all that apply)**:** ☐ PTF ☐ non-PTF ☑ Distribution
Total Gross Capital Request: $605K	**Authorization Type:** Initial Funding

Executive Summary

This project is being established to address the recurring outages on [redacted] in Mansfield. [redacted] served by this trip saver that have experienced nine outages in the last four years with all of them being tree related.

This circuit was last trimmed in the 2018 but is scheduled for trimming in 2022. The majority of the poles are over 50 years old and in need of replacement.

This area's infrastructure is a 13.8KV circuit with 11,050 ft of #2 ACSR or #631 COMP bare wire on ridge pins. There are multiple splices along most spans that need to be addressed.

In conjunction with tree trimming, project CD01946 proposes to reconductor the existing 11,050 ft of bare wire with single phase 336 TW with ridge pin construction from pole 1808 to pole 1500 on [redacted]

[redacted]

Project Costs Summary

Capital Costs	2024	2025	2026+	Total
Internal Labor and Construction Equipment	$23	$0	$0	$23
Outside Services	$215	$0	$0	$215
Materials	$67	$0	$0	$67
Removals	$34	$0	$0	$34
Risk and Contingency	$29	$0	$0	$29
Other	$0	$0	$0	$0
Subtotal	**$369**	**$0**	**$0**	**$369**

Indirect Capital Costs	2024	2025	2026+	Total
Indirects/Overheads (including benefits)	$224	$0	$0	$224
Capitalized interest or AFUDC, if any	$12	$0	$0	$12
Subtotal	**$236**	**$0**	**$0**	**$236**
Total Capital Costs (Gross)	**$605**	**$0**	**$0**	**$605**

Technical Justification:

Project Need, Objective and Justification

This project was established to address frequent outages on [redacted] in Mansfield, CT which impact [redacted] customers. There have been 9 outages in the last four years with five of them being in the last two years.

As a result of that, this project will replace 11,050 ft of bare wire with 336 TW, [redacted]
With these changes and expected tree trimming in 2022, it will help increase reliability and avoid future outages in this area.

Project Scope

The scope of this project is as follows:

- [redacted]
- Remove hazard trees.

Major Material:

11,050 ft.	Single Phase 336 Tree Wire
52	Poles
3	Single Phase Radial Reclosers

Background

Outage History

Year	Duration(min)	Cause Type	Weather	Storm	Device Name
2019	190	Tree Related	High Winds	FALSE	1P_RR: 1808:12J5-1600F
2019	86	Tree Related	Normal Weather	FALSE	1P_RR: 1808:12J5-1600F
2019	119	Vines	Normal Weather	FALSE	1P_RR: 1808:12J5-1600F
2019	270	Tree Related	High Winds	TRUE	1P_RR: 1808:12J5-1600F
2020	107	Tree Related	Normal Weather	FALSE	1P_RR: 1808:12J5-1600F
2020	77	Tree Related	Thunderstorm	FALSE	1P_RR: 1808:12J5-1600F
2020	5670	Tree Related	High Winds	TRUE	1P_RR: 1808:12J5-1600F
2021	73	Tree Related	Normal Weather	FALSE	1P_RR: 1808:12J5-1600F
2022	195	Tree Related	High Winds	FALSE	1P_RR: 1808:12J5-1600F

Total Customer Minutes: 288,460

Total Customer Interruptions: 1,064

Total Number of Events: 9

Customer Interruptions Saved: 133

Cost Per Cust. Intr. Saved: 4,645.69

Customer Minutes Saved: 32,452

Cost Per Cust. Min. Saved: 19.04

Regulatory Approvals:

No

Project Schedule

Milestone/Phase Name	Estimated Date
100% Engineering Completion	November 2023
Construction Start	January 2024
In Service Date	December 2024

Risks and Risk Mitigation Plans

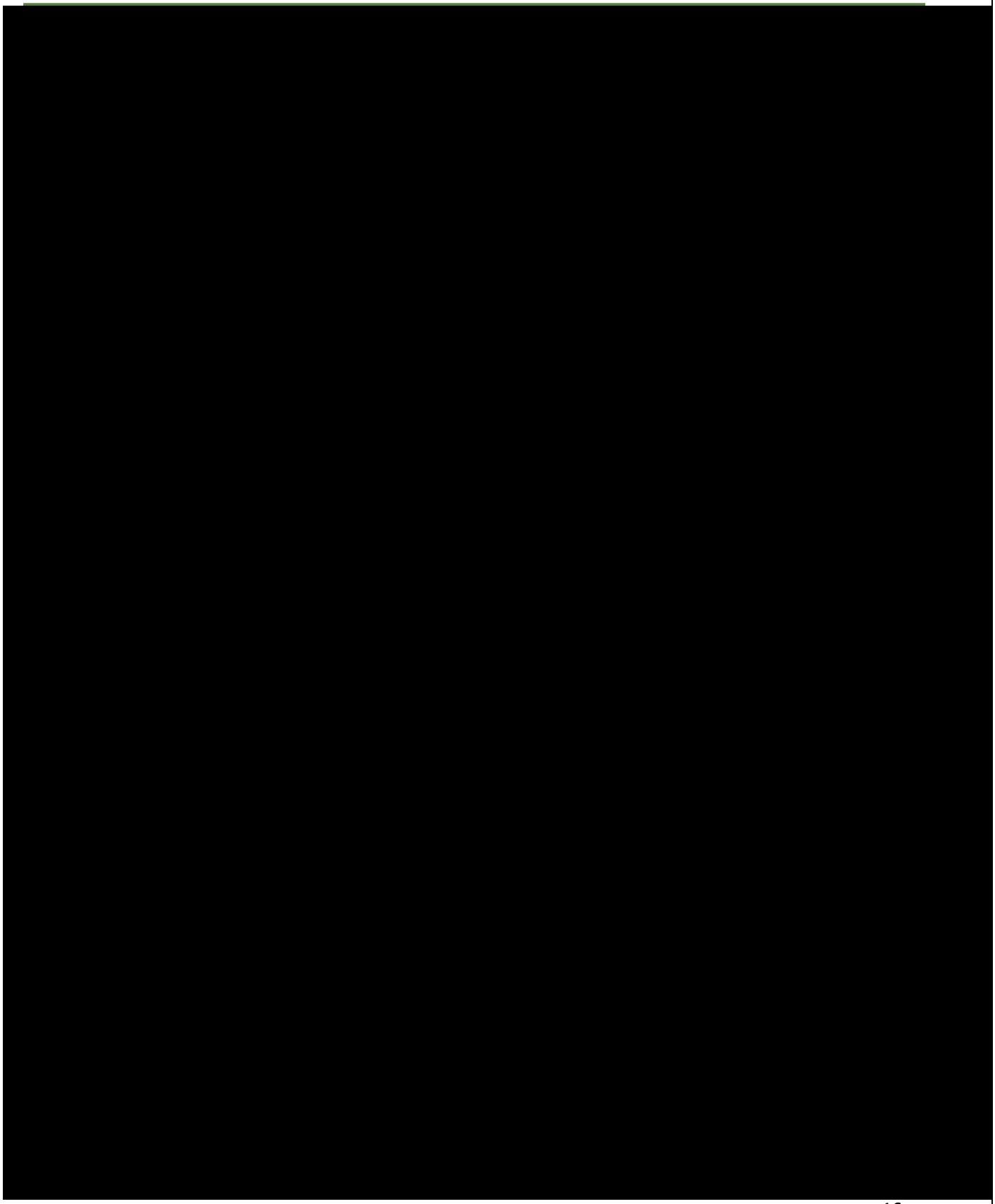
Risk Event	Risk Horizon	Likelihood of Occurrence	Risk Mitigation
Actual cost higher than estimated due to scope changes.	2024	Medium	Included contingency costs in the funding request. Perform detailed Field Analysis and walk down in project development to avoid potential issues.
Customer Permission / Siting Council / Municipal approvals	2024	Low	Design to minimize customer impact. Project Preplanning and customer/community outreach
Internal construction resources not available to perform the work.	2024	High	Plan internal resources to perform the work. Use competitive bidding to ensure lowest outside labor cost.
Internal engineering resources not available to perform the work.	2023	Medium	Plan internal resources to perform the work. Use competitive bidding to ensure lowest outside labor cost.
Storm delays	2024	Medium	If storm activity delays work, we may be forced to use external resources.

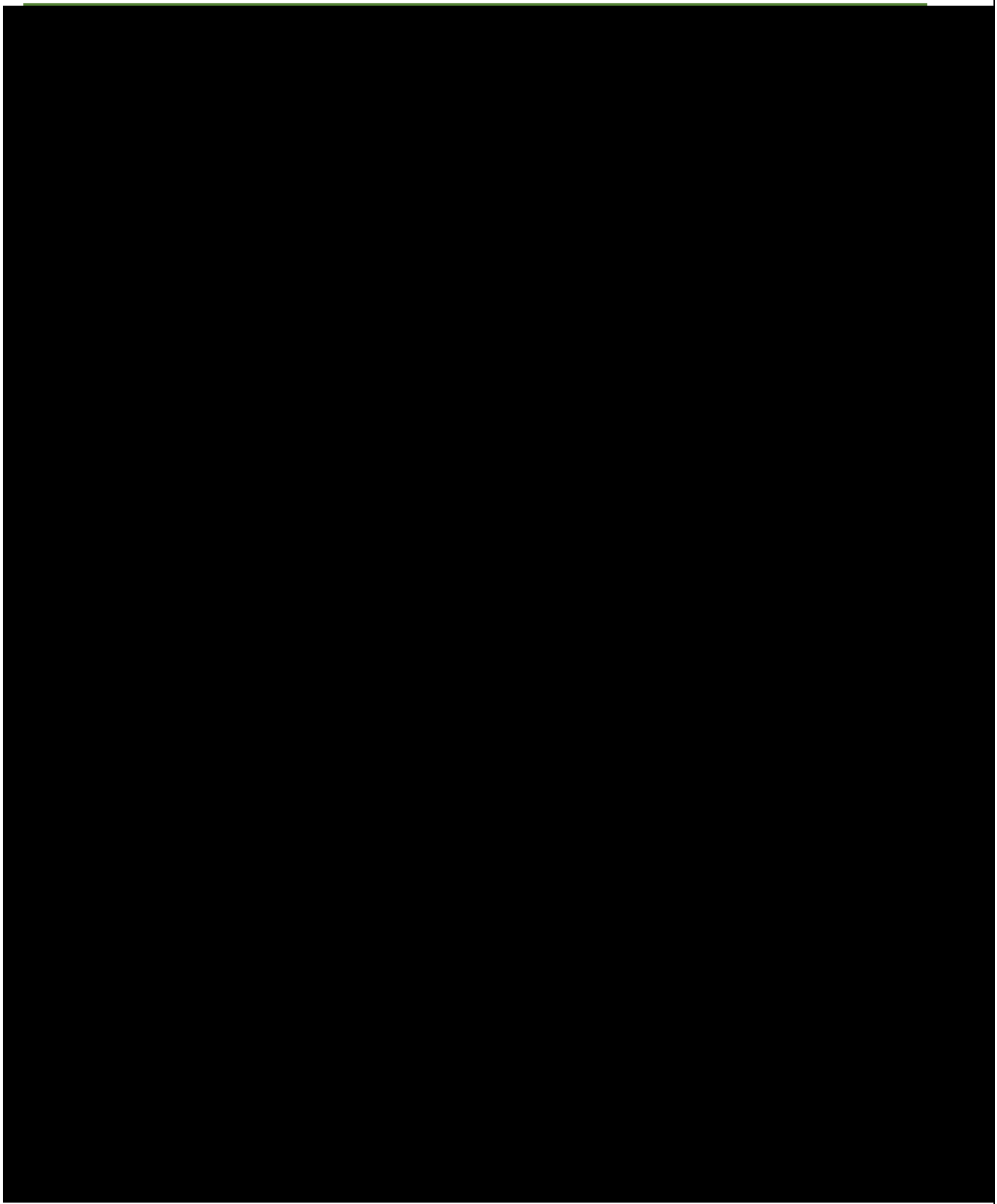
References

No

Appendices (One-Line Diagrams, Images, etc.)







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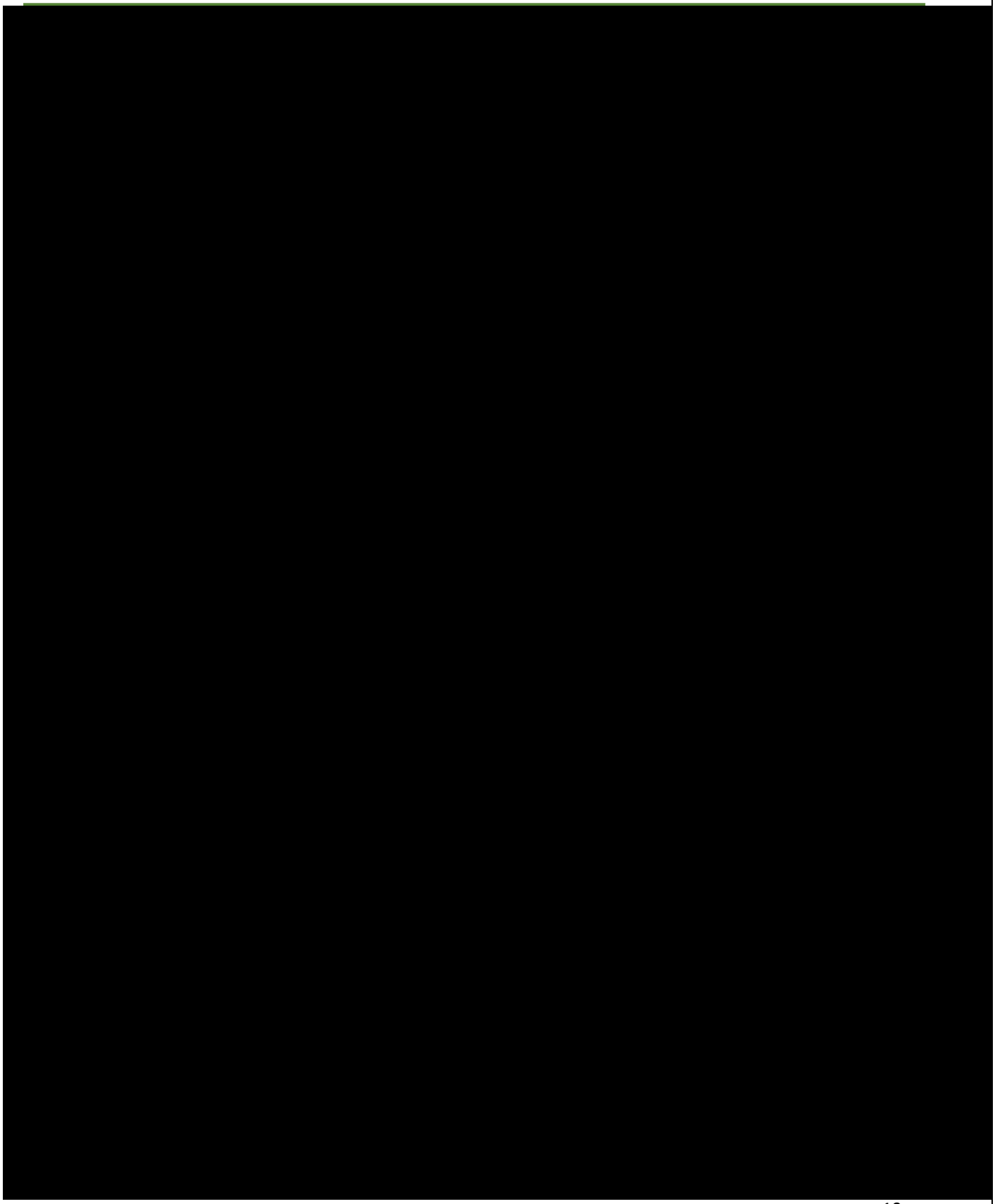

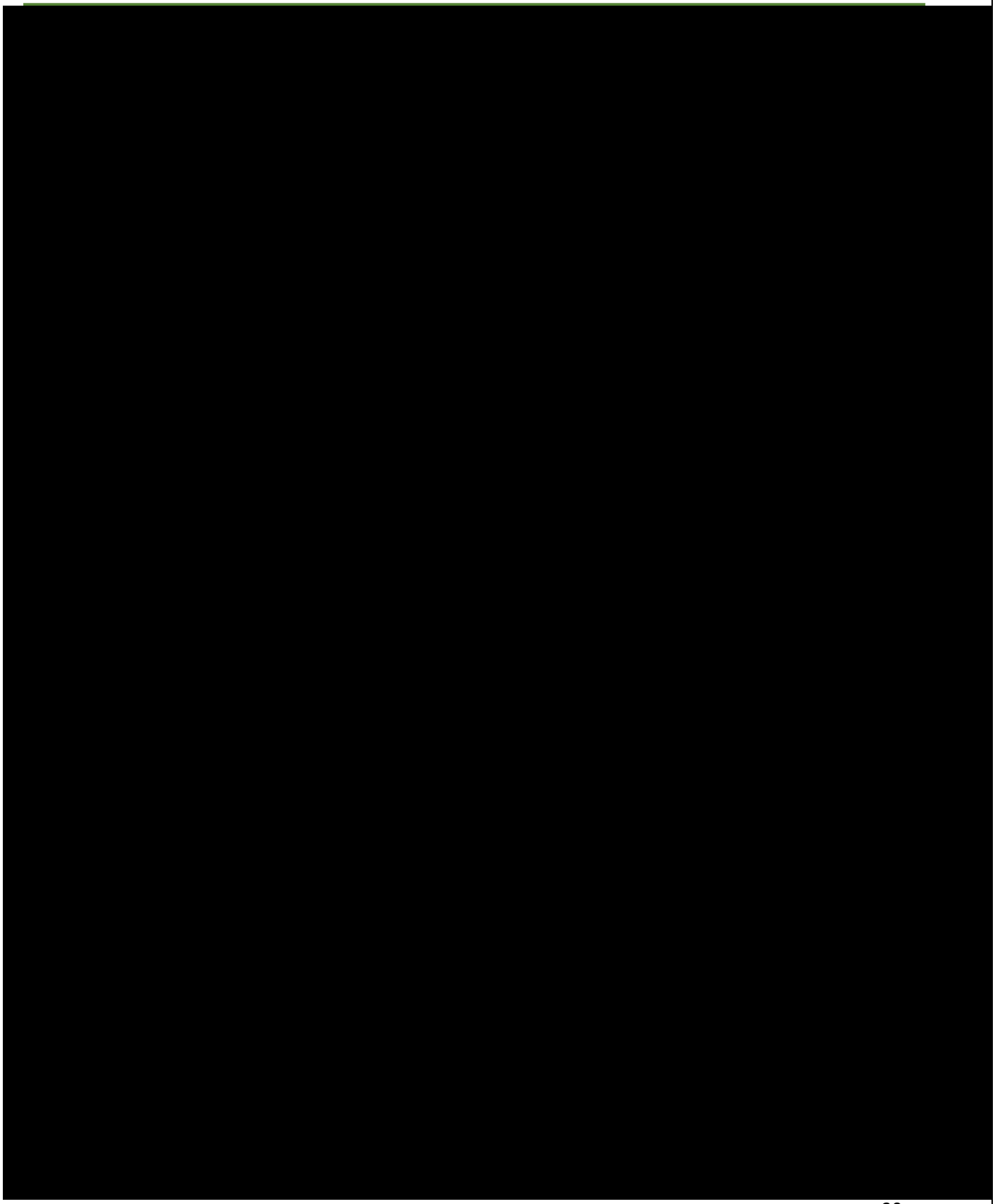

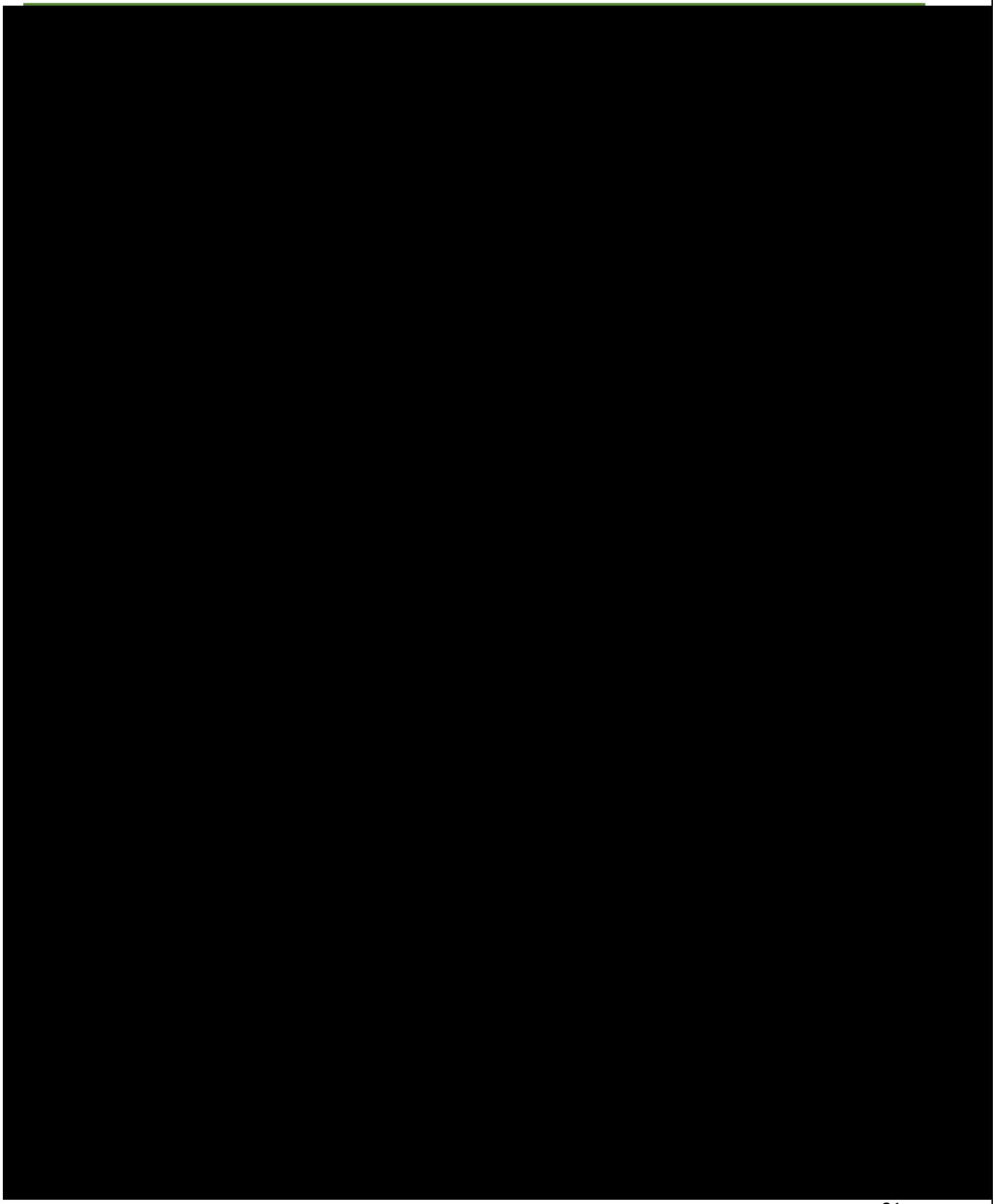

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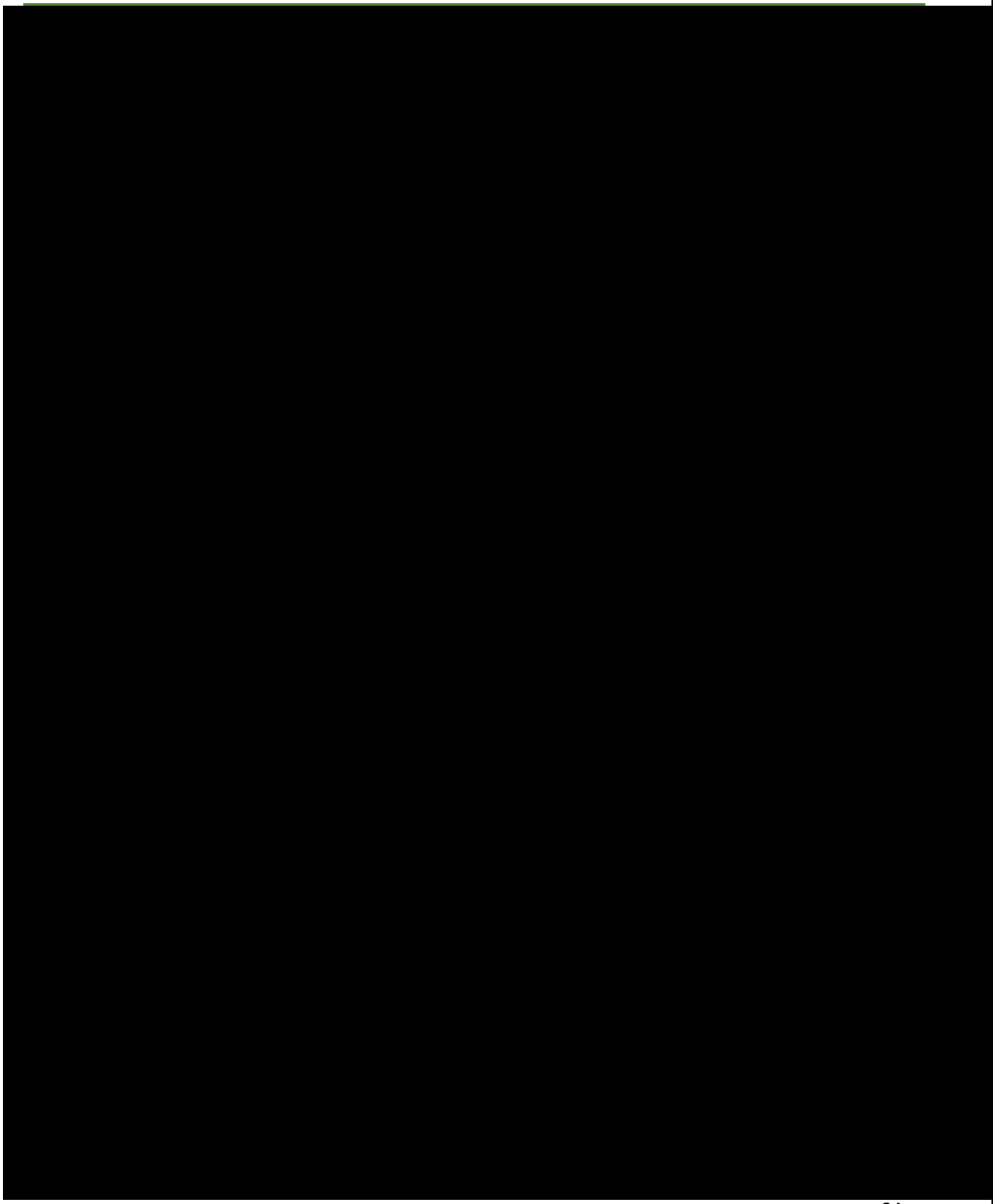

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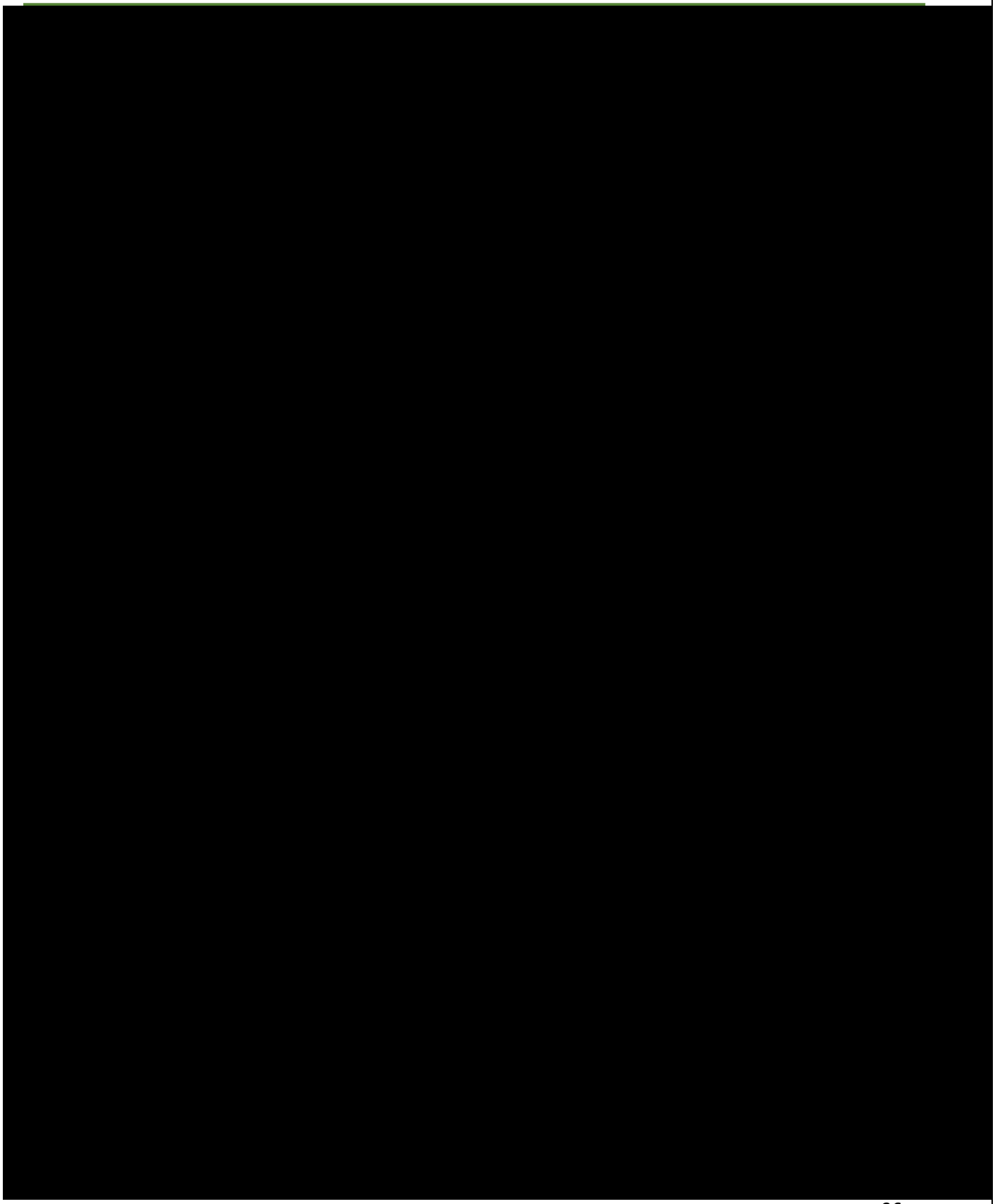

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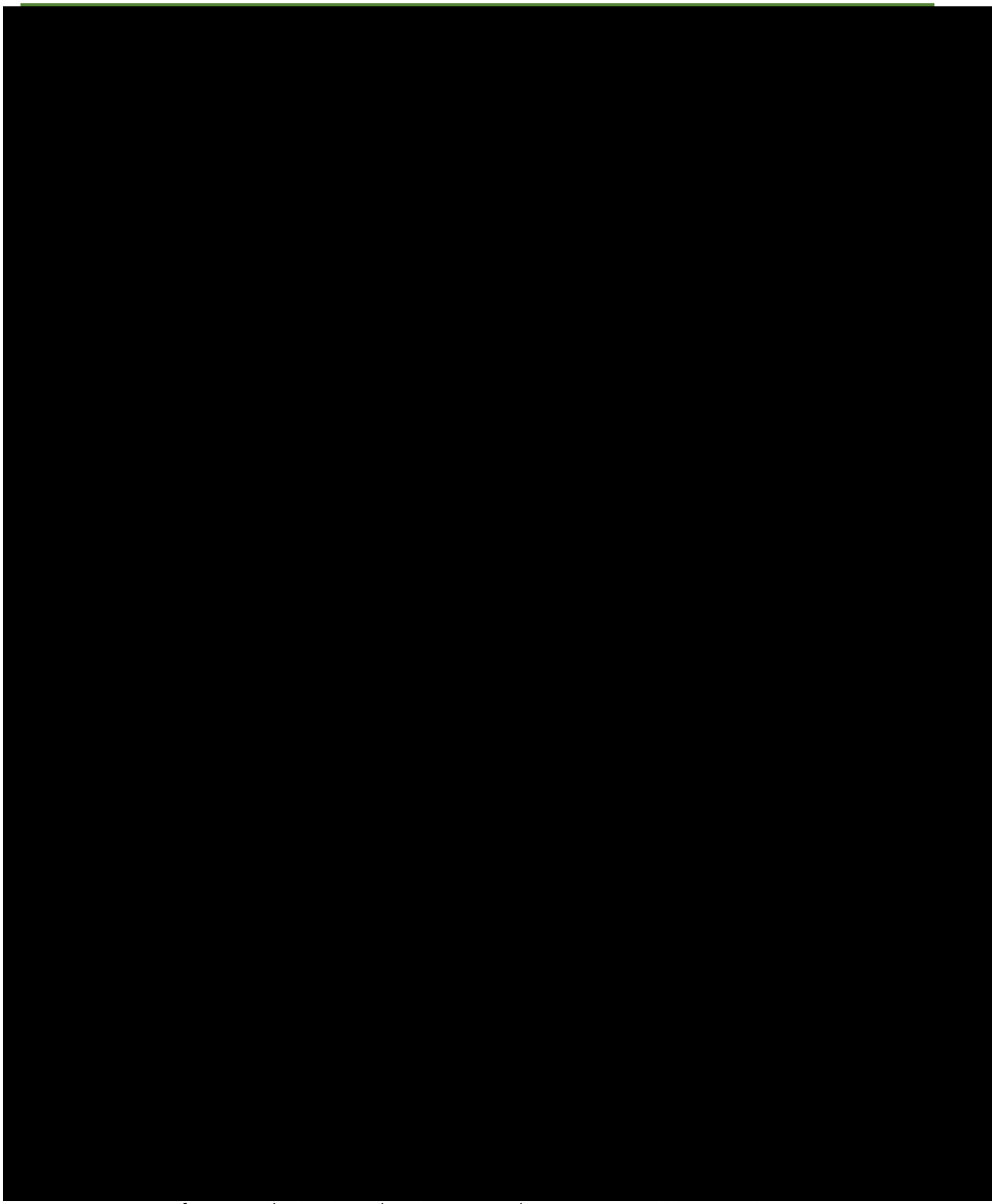

Refer to Distribution Capital Project Approval Process JA-AM-2001-B, Rev.3
Refer to Distribution Capital Project Supplement Process JA-AM-2001-C, Rev.0