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JUN 28 2000

BUREAU OF AIR REGULATION

June 22, 2000

Mr. Scott Sheplak, P.E.
Bureau of Air Regulation
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Dear Mr. Sheplak:

Re: Revised Heat Input Curves - FPC Hines Facility

Copies of the proposed revised heat input curves and the supporting test data for Units 1A and 1B at Florida Power Corporation's (FPC) Hines Energy Complex were submitted on June 12. Mr. Russell Wider has requested that these be accompanied by a professional engineer seal and certified by the responsible official. I have enclosed the proposed curves and the test data with the requested certifications.

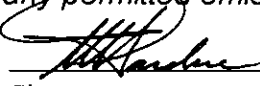
Please contact me at (727) 826-4334 if you have any questions or need additional information.

Sincerely,

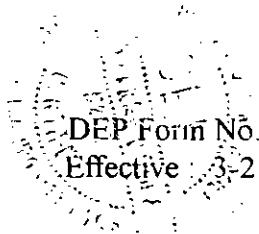
A handwritten signature in black ink, appearing to read "J. Michael Kennedy". The signature is fluid and cursive, written over a light background.

J. Michael Kennedy, Q.E.P.
Manager, Air Programs

Owner/Authorized Representative or Responsible Official

1. Name and Title of Owner/Authorized Representative or Responsible Official : Name : W. Jeffrey Pardue, C.E.P. Title : Director, Environmental Services
2. Owner or Authorized Representative or Responsible Official Mailing Address : Organization/Firm : Florida Power Corporation Street Address : P.O. Box 14042, MAC BB1A City : St. Petersburg State : FL Zip Code : 33733
3. Owner/Authorized Representative or Responsible Official Telephone Numbers : Telephone : (727)826-4301 Fax : (727)826-4216
4. Owner/Authorized Representative or Responsible Official Statement : <i>I, the undersigned, am the owner or authorized representative* of the non-Title V source addressed in this Application for Air Permit or the responsible official, as defined in Rule 62-210.200, F.A.C., of the Title V source addressed in this application, whichever is applicable. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof. I understand that a permit, if granted by the Department, cannot be transferred without authorization from the Department, and I will promptly notify the Department upon sale or legal transfer of any permitted emissions units.</i>  Signature _____ Date <u>6/23/00</u>

* Attach letter of authorization if not currently on file.



Application Processing Fee

Check one :

[X] Attached - Amount : _____ [] Not Applicable.

Construction/Modification Information

1. Description of Proposed Project or Alterations : Proposed revision to the heat input curves for Power Block 1, Units 1A and 1B. Maximum heat input at 30 deg. F for oil firing does not change. Maximum heat input at 30 deg. F for natural gas firing increases from 1,950 to 1,980 mmBtu/hour.
2. Projected or Actual Date of Commencement of Construction :
3. Projected Date of Completion of Construction :

Professional Engineer Certification

1. Professional Engineer Name : Jennifer A. Stenger Registration Number : 0052125
2. Professional Engineer Mailing Address : Organization/Firm : Florida Power Corporation Street Address : P.O. Box 14042, MAC BB1A City : St. Petersburg State : FL Zip Code : 33733
3. Professional Engineer Telephone Numbers : Telephone : (727)826-4132 Fax : (727)826-4216

4. Professional Engineer Statement :

I, the undersigned, hereby certify, except as particularly noted herein, that :*

(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollutant control equipment described in this Application for Air Permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and

(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.

If the purpose of this application is to obtain a Title V source air operation permit (check here [] if so), I further certify that each emissions unit described in this Application for Air Permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance schedule is submitted with this application.

If the purpose of this application is to obtain an air construction permit for one or more proposed new or modified emissions units (check here [✓] if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.

If the purpose of this application is to obtain an initial air operation permit or operation permit revision for one or more newly constructed or modified emissions units (check here [] if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.

Jennifer A. Stenger

Signature
(seal)

6/23/00

Date

I. Part 6 - 1

1. Name of the person or organization certifying the information:
2. Title of the person certifying the information:
3. Date of certification:

* Attach any exception to certification statement.

4. Name of the person or organization certifying the information:
5. Title of the person certifying the information:
6. Date of certification:

7. Name of the person or organization certifying the information:
8. Title of the person certifying the information:
9. Date of certification:

10. Name of the person or organization certifying the information:
11. Title of the person certifying the information:
12. Date of certification:

13. Name of the person or organization certifying the information:
14. Title of the person certifying the information:
15. Date of certification:

I. Part 6 - 2

DEP Form No. 62-210.900(1) - Form
Effective : 3-21-96

Application Contact

1. Name and Title of Application Contact :

Name : J. Michael Kennedy, Q.E.P.
Title : Manager, Air Programs

2. Application Contact Mailing Address :

Organization/Firm : Florida Power Corporation
Street Address : P.O. Box 14042, MAC BB1A
City : St. Petersburg
State : FL Zip Code : 33733

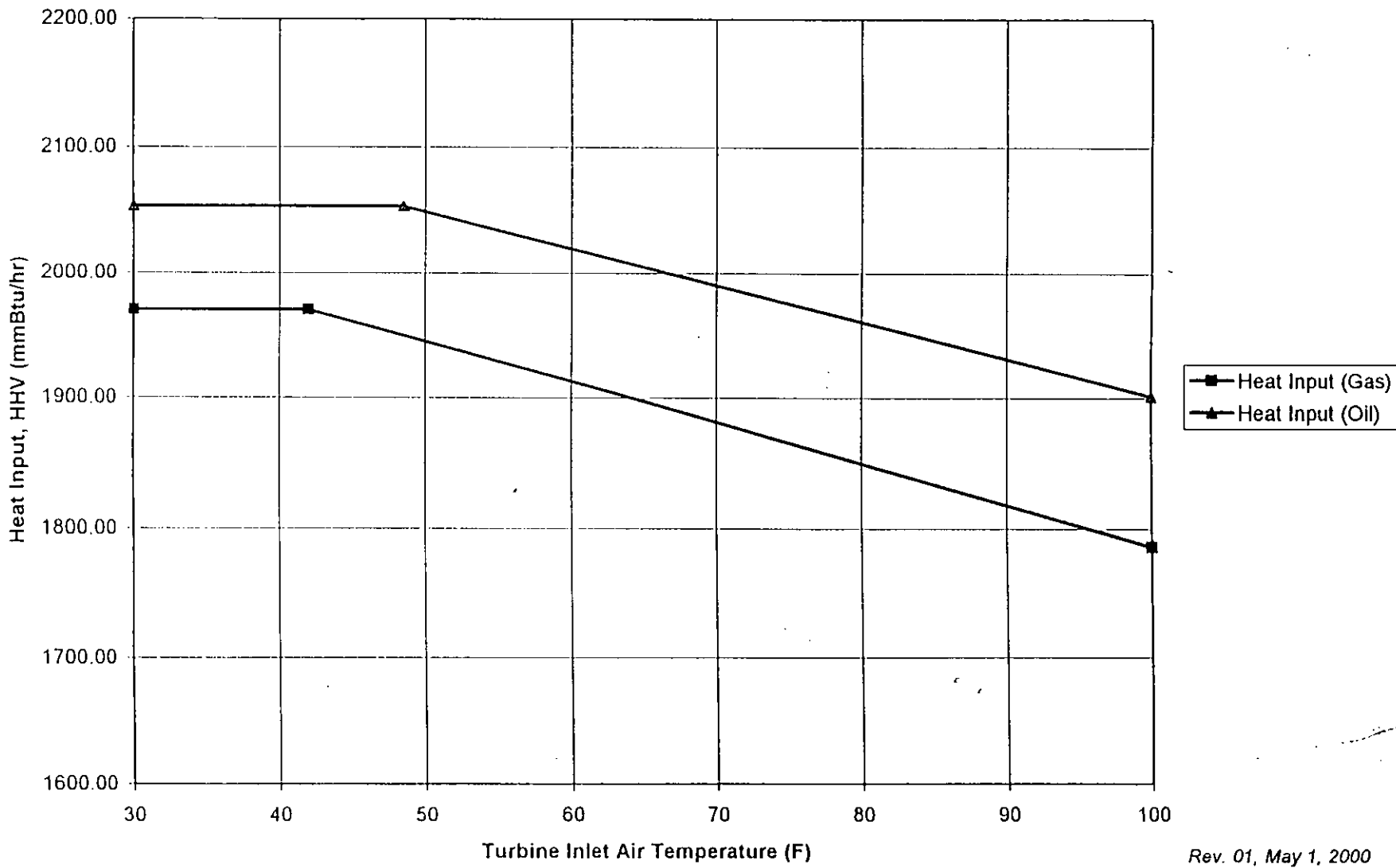
3. Application Contact Telephone Numbers :

Telephone : (727)826-4334 Fax : (727)826-4216

Application Comment

This application is for the proposed revision of the heat input curves for Units 1A and 1B.

Hines Energy Complex - Power Block 1
CT Heat Input, HHV (per CT) vs. Turbine Inlet Air Temperature, Rev. 01



Rev. 01, May 1, 2000

T Ambient (F)	GasHeat Content (Btu/lb)	Gas Fuel Flow (lbm/hr)	GAS Heat Input (MMBtu/hr) HHV	GAS Heat Input 10% Margin	GAS Heat Input 5% Margin	OilHeat Content (Btu/lb)	Oil Fuel Flow (lbm/hr)	OIL Heat Input, HHV (MMBTU)	OIL Heat Input, HHV 10% Margin	OIL Heat Input, HHV 5% Margin
30.0	23210	80050	1857.96	2043.76	1950.86	19903	98300	1956.46	2152.11	2054.29
42.0	23210	80050	1857.96	2043.76	1950.86	19903	98300	1956.46	2152.12	2054.29
45.0	23210	79500	1845.20	2029.71	1937.45	19903	98300	1956.46	2152.11	2054.29
48.5	23210	78845	1829.99	2012.99	1921.49	19903	98300	1956.46	2152.11	2054.29
60.0	23210	76550	1776.73	1954.40	1865.56	19903	95450	1899.74	2089.72	1994.73
72.0	23210	74250	1723.34	1895.68	1809.51	19903	92550	1842.02	2026.22	1934.12
85.0	23210	71850	1667.64	1834.40	1751.02	19903	89550	1782.31	1960.55	1871.43
88.3	23210	71260	1653.94	1819.34	1736.64	19903	88800	1767.39	1944.13	1855.76
105.0	23210	66700	1548.11	1702.92	1625.51	19903	85100	1693.75	1863.12	1778.43

Red = Estimated

TEST DATA

Test Date	Unit, fuel	ambient T (F)	Fuel Flow, Gas (lb/hr)	Heating Value (LH) Heat Input (HHV) Btu/lb	mmBtu/hr
4/17/99	1A, gas CC Test	59.5	76627	20637	1753.165
	1B, gas	61.1	76709	20637	1755.041
4/18/99	1A, oil	64.1	86176	18568	1707.964
	1B, oil	64.6	86454	18568	1713.474
3/21/00	1A, gas SC Pre-Te	80.6			1676.27
	1B, gas	83.2			1679.175
4/14/00	1A, gas SC Post-T	69.1			1772
	1B, gas	66			1791.77

Heat Input Curve, Rev 01:

PROPOSED NEW LINE:			
	Ambient Temp (F)	Heat Input (HHV)	1% Add'l Margin
GAS:	30	1950.86	1970.37
	42	1950.86	1970.37
	100	1768.901	1786.59
OIL:	30	2054.29	
	48.5	2054.29	
	100	1901.70	



Russell

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JUN 19 2000

BUREAU OF AIR REGULATION

June 12, 2000

Mr. Scott Sheplak, P.E.
Bureau of Air Regulation
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Dear Mr. Sheplak:

Re: Revised Heat Input Curves - FPC Hines Facility

I have enclosed hardcopies of the proposed revised heat input curves and the supporting test data for Units 1A and 1B at Florida Power Corporation's (FPC) Hines Energy Complex. This information was previously sent to Mr. Russell Wider by email, and this submittal formalizes that transmission. FPC requests that DEP issue the construction permit amendment as soon as possible in order to enable FPC to utilize the available capacity at Hines.

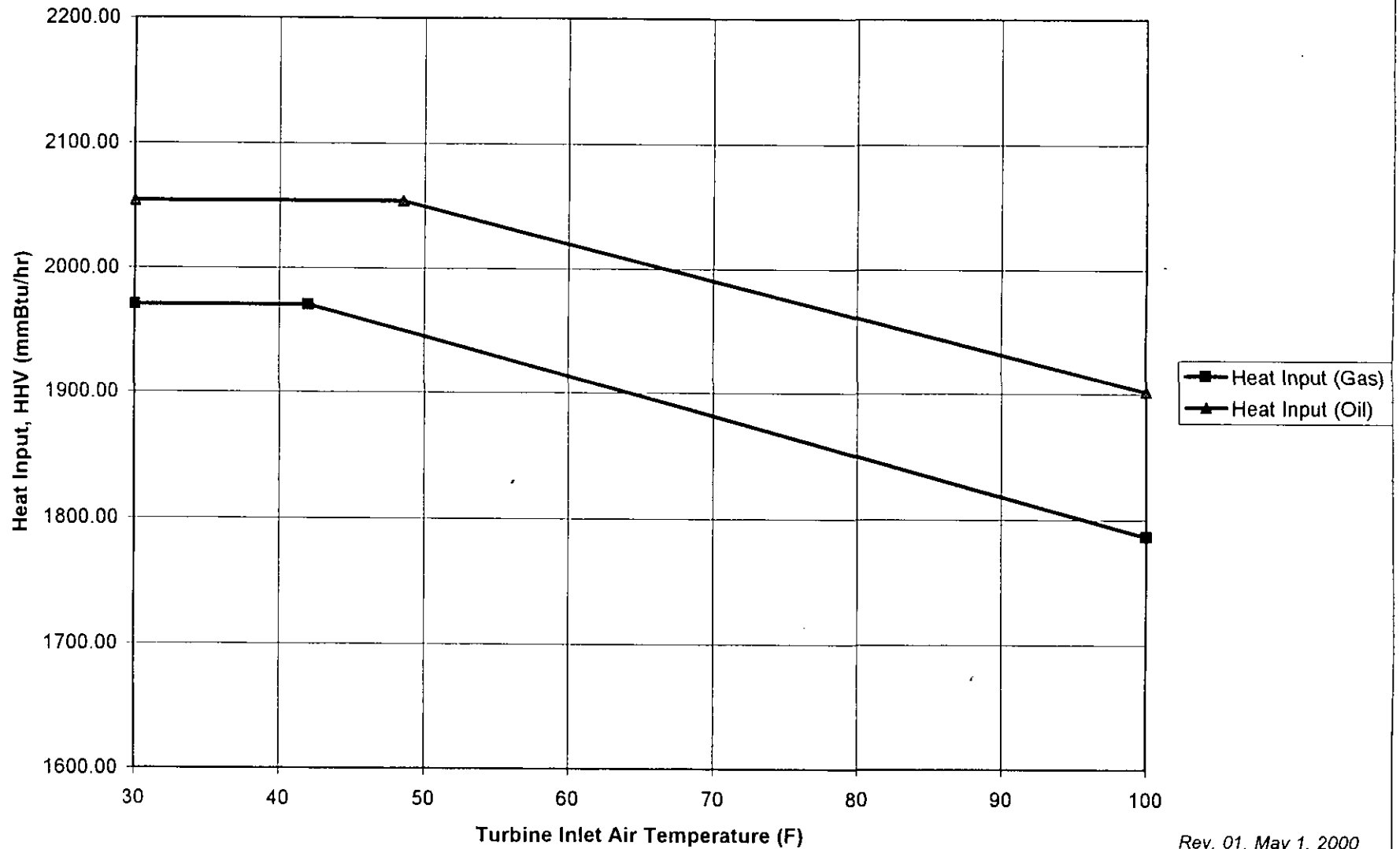
Thank you for your consideration of FPC's request. Please contact me at (727) 826-4334 if you have any questions.

Sincerely,

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J. Michael Kennedy, Q.E.P.
Manager, Air Programs

Hines Energy Complex - Power Block 1
CT Heat Input, HHV (per CT) vs. Turbine Inlet Air Temperature, Rev. 01



Rev. 01, May 1, 2000

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	100	1901.70	



Jeb Bush
Governor

Department of Environmental Protection

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

David B. Struhs
Secretary

Russell Wider

May 25, 2000

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. W. Jeffrey Pardue, CEP
Director Environmental Services
Florida Power Corporation
Post Office Box 14042, MAC BB1A
St. Petersburg, Florida 33733

Re: Request for Additional Information Regarding AC Permit Modification
FPC Hines Energy Power Block I, 1050234-002-AC

Dear Mr. Pardue:

On May 22, 2000, the Department received your request for a permit amendment to include revised heat input curves for Units 1A and 1B at Florida Power Corporation's (FPC) Hines Energy Complex. The revised heat input curves for both natural gas and oil were a result of an adjustment to improve the performance of the units.

However, in order to continue processing your application, the Department will need the below additional information pursuant to Rule 62-4.055(1), F.A.C. Should your response to any of the below items require new calculations, please submit the new calculations, assumptions, reference material and appropriate revised pages of the application form.

1. We understand that there is an approximate 1% increase at ISO conditions in the overall maximum heat input from the original permitted limit. At the upper end of the temperature range, the maximum heat input for both natural gas and oil firing, reflect an increase of 5% or more over the current permit's curve. Please provide actual test data for both oil-firing and natural gas-firing to support such a change at the high temperature ranges.

The Department will resume processing your application after receipt of the requested information. Rule 62-4.050(3), F.A.C. requires that all applications for a Department permit must be certified by a professional engineer registered in the State of Florida. This requirement also applies to responses to Department requests for additional information of an engineering nature. As a result, at a minimum your response to Item number 1, above should be certified by a professional engineer registered in the State of Florida. Material changes to the application should also be accompanied by a new certification statement by the authorized representative or responsible official. Permit applicants are advised that Rule 62-4.055(1), F.A.C., now requires applicants to respond to requests for information within 90 days. If there are any questions, please call Russell Wider at 850/921-9585.

Sincerely,

Scott M. Sheplak, P.E.
Administrator
Title V Section

/raw

cc:
Bill Thomas, P.E., SWD

"More Protection, Less Process"

Printed on recycled paper.