

The Narragansett Electric Company  
d/b/a Rhode Island Energy

## **Proposed FY 2024 Electric Infrastructure, Safety, and Reliability Plan**

### **Responses to Division Data Requests – Sets 2 & 3**

### **Book 3 of 3**

December 22, 2022

Docket No. 22-53-EL

Submitted to:  
Rhode Island Public Utilities Commission

Submitted by:



**Rhode Island Energy™**  
a PPL company

## Motion

STATE OF RHODE ISLAND  
PUBLIC UTILITIES COMMISSION

---

THE NARRAGANSETT ELECTRIC COMPANY )  
d/b/a RHODE ISLAND ENERGY'S FY 2024 ELECTRIC ) DOCKET NO. 22-53-EL  
INFRASTRUCTURE, SAFETY AND )  
RELIABILITY PLAN )  
)

---

**MOTION OF THE NARRAGANSETT ELECTRIC COMPANY**  
**d/b/a RHODE ISLAND ENERGY FOR PROTECTIVE TREATMENT OF**  
**CONFIDENTIAL INFORMATION**

The Narragansett Electric Company d/b/a Rhode Island Energy (the “Company”) hereby respectfully requests that the Public Utilities Commission (“PUC”) grant protection from public disclosure certain confidential information submitted by the Company in the above referenced docket. The reasons for the protective treatment are set forth herein. The Company also requests that, pending entry of that finding, the PUC preliminarily grant the Company’s request for confidential treatment pursuant to 810-RICR-00-00-1.3(H)(2).

The records that are the subject of this Motion that require protective treatment from public disclosure are the Company’s confidential Attachment DIV 3-2; confidential Attachment DIV 3-3; the confidential version of DIV 3-10; and the confidential version of DIV 3-11 (collectively, the “Confidential Attachments”) which were submitted to the Division of Public Utilities and Carriers (“Division”) in response to the Third Set of Data Requests issued by the Division during the pre-filing stage and then filed by the Company in the above referenced docket on December 22, 2022. The Company requests protective treatment of the Confidential Attachments in accordance with 810-RICR-00-00-1.3(H) and R.I. Gen. Laws § 38-2-2-(4)(B).

## **I.     LEGAL STANDARD**

For matters before the PUC, a claim for protective treatment of information is governed by the policy underlying the Access to Public Records Act (“APRA”), R.I. Gen. Laws § 38-2-1 et seq. See 810-RICR-00-00-1.3(H)(1). Under APRA, any record received or maintained by a state or local governmental agency in connection with the transaction of official business is considered public unless such record falls into one of the exemptions specifically identified by APRA. See R.I. Gen. Laws §§ 38-2-3(a) and 38-2-2(4). Therefore, if a record provided to the PUC falls within one of the designated APRA exemptions, the PUC is authorized to deem such record confidential and withhold it from public disclosure.

## **II.    BASIS FOR CONFIDENTIALITY**

The Confidential Attachments, which are the subject of this Motion, are exempt from public disclosure pursuant to R.I. Gen. Laws § 38-2-2(4)(B) as “[t]rade secrets and commercial or financial information obtained from a person, firm, or corporation that is of a privileged or confidential nature.” The Rhode Island Supreme Court has held that this confidential information exemption applies where the disclosure of information is likely either (1) to impair the government’s ability to obtain necessary information in the future; or (2) to cause substantial harm to the competitive position of the person from whom the information was obtained. Providence Journal v. Convention Center Authority, 774 A.2d 40 (R.I. 2001). The first prong of the test is satisfied when information is provided to the governmental agency and that information is of a kind that would customarily not be released to the public by the person from whom it was obtained. Providence Journal, 774 A.2d at 47.

The Confidential Attachments consist of commercial information. The Company would customarily not release this information to the public. The Company’s submission of the Confidential Attachments stem from data requests issued by the Division in the above-referenced

docket. Accordingly, the Company is providing the Confidential Attachments to fulfil its regulatory responsibilities.

Public disclosure of the information would negatively impact the Company's ability to effectively operate to provide safe and reliable service to its customers. As such, the Company would not release this information to the public. Therefore, this information satisfies the exception found in R.I. Gen. Laws § 38-2-2(4)(B).

### **III. CONCLUSION**

For the foregoing reasons, the Company respectfully requests that the PUC grant this motion for protective treatment of the Confidential Attachments.

Respectfully submitted,

**RHODE ISLAND ENERGY**  
By its attorney,



---

Andrew S. Marcaccio (#8168)  
Rhode Island Energy  
280 Melrose Street  
Providence, RI 02907  
(401) 784-4263

Dated: December 22, 2022

**CERTIFICATE OF SERVICE**

I hereby certify that on December 22, 2022, I delivered a true copy of the foregoing Motion via electronic mail to the parties on the Service List for Docket No. 22-53-EL.



---

Joanne M. Scanlon

**Division Set 2**

Andrew S. Marcaccio, Counsel  
PPL Services Corporation  
[AMarcaccio@pplweb.com](mailto:AMarcaccio@pplweb.com)

280 Melrose Street  
Providence, RI 02907  
Phone 401-784-7263



December 8, 2022

**VIA ELECTRONIC MAIL & HAND DELIVERY**

Luly E. Massaro, Commission Clerk  
Rhode Island Division of Public Utilities and Carriers  
89 Jefferson Boulevard  
Warwick, RI 02888

**RE: RIE's Proposed FY2024 Electric Infrastructure, Safety, and Reliability Plan**  
**Responses to Division Set 2**

Dear Ms. Massaro:

On behalf of The Narragansett Electric Company d/b/a Rhode Island Energy (the "Company"), enclosed, please find the Company's responses to the Division's Second Set of Data Requests in the above-referenced matter.

Thank you for your attention to this filing. If you have any questions, please contact me at 401-784-4263.

Sincerely,



Andrew S. Marcaccio

Enclosures

cc: Gregory Schultz, Esq., Division  
Christy Hetherington, Esq., Division  
Paul Roberti, Esq., Division  
Al Contente, Division  
John Bell, Division  
Greg Booth, Division  
Linda Kushner, Division

The Narragansett Electric Company  
d/b/a Rhode Island Energy

In Re: Proposed FY 2024 Electric Infrastructure, Safety and Reliability Plan  
21-Month Filing: Period April 2023 – December 2024  
Responses to the Division's Second Set of Data Requests  
Issued on November 17, 2022

---

Division 2-1

Request:

Does the Company currently have a worst performing feeder program? If so, provide details including the reliability criteria and feeder characteristics considered when identifying and ranking feeders in terms of performance. Discuss how the Company evaluates solutions for improvements, how feeders are prioritized, how decisions to budget and advance work within an ISR Plan are considered, and how future reliability performance is tracked and measured. Provide all program documents.

Response:

Yes, the Company conducts an annual review of its worst performing feeders. The Company chooses circuits based on their reliability history with input from the Operations group. The following are the selection criteria the Company uses:

1. The Company determines the five-year average interruption frequency and duration performance of each of Rhode Island Energy's approximately 400 distribution circuits. Circuit Average Interruption Frequency Index ("CKAIFI") is calculated as the total number of customer interruptions divided by the total number of customers connected to the circuit, expressed in number of interruptions per year. Circuit Average Interruption Duration Index ("CKAIDI") is calculated as the total minutes of customer interruptions for a circuit divided by the total number of customers connected to the circuit, expressed in minutes per year.
2. The Company assigns a CKAIDI and CKAIFI ranking to each circuit in inverse order relative to the other circuits. The worst performing circuit is assigned 1, the second worst performing circuit is assigned 2, and so on.
3. The Company adds the CKAIDI and CKAIFI numbers together to create a combined CKAIDI/CKAIFI ranking for each circuit. The worst performing (lowest ranking) 10% of circuits are presented and discussed at a meeting that includes Operations, Distribution Planning, and Control Room personnel. The final 5% of circuits (approximately 20) are selected by consensus.

Once selected, the circuits are assigned to the Distribution Field Engineering group for a comprehensive engineering reliability review. The engineer reviews each circuit's outage history for event trends and proposes remedies to improve the circuit's performance. Commonly recommended remedies include: targeted trimming, installation of fault indicators, animal guard installations, and additional fuse/recloser sectionalization. The Company proceeds with

The Narragansett Electric Company  
d/b/a Rhode Island Energy  
In Re: Proposed FY 2024 Electric Infrastructure, Safety and Reliability Plan  
21-Month Filing: Period April 2023 – December 2024  
Responses to the Division's Second Set of Data Requests  
Issued on November 17, 2022

---

Division 2-1, page 2

previously proposed work on the circuit that it determines will improve reliability. The engineer also seeks input from the area line foreman and local arborist for proposed work.

Short term work, typically costing less than \$100,000, that is not covered by an existing program (such as cutout-mounted reclosers installations) is forwarded to the Design group to advance work. The work primarily is charged to the reliability blanket.

Occasionally, longer term work, costing more than \$100,000, is recommended. If it is not associated with an existing program (such as the cable replacement program), it follows the normal justification process. A job specific accounting number is requested in Power Plant (accounting software and project repository) and routed for management authorization. Once approved, the work is included in the appropriate budget year. Historically, allocation of funds has been limited for this longer-term, reliability-based work.

Circuit reliability statistics are calculated annually; performance is measured by comparing the year-over-year reliability results for the year after the recommended work was completed.

Two sample memoranda of completed engineering reviews are provided as Attachment DIV 2-1-1 and Attachment DIV 2-1-2.



## Memorandum

**To:** Caitlin Broderick  
**From:** Evan Magno  
**Date:** 8/19/2021  
**Subject:** Problem and Poor Performing Reliability Review for feeder 56-63F6

---

This memo documents the recommendations to improve both CKAIFI and CKAIIDI on the 2020 NECo Circuit 56-63F6.

### RELIABILITY PERFORMANCE

The following tables show the historical reliability performance and the predicted performance improvement after recommendations in this document are completed.

CKAIFI Feeders	2020 Cust. Served	5 Year Average CKAIFI	CKAIFI Performance History by Year					5 Year Average CKAIFI After Proposed Improvements		
			2020	2019	2018	2017	2016	Pending Work	Short Term Work	Long Term Work
56-63F6	2,617	1.896	2.535	3.607	1.417	1.375	0.503	N/A	NA	N/A

CKAIDI Feeders	2020 Cust. Served	5 Year Average CKAIIDI	CKAIDI Performance History by Year					5 Year Average CKAIIDI After Proposed Improvements		
			2020 (min.)	2019 (min.)	2018 (min.)	2017 (min.)	2016 (min.)	Pending Work	Short Term Work	Long Term Work
56-63F6	2,617	172.09	180.64	311.67	154.91	147.39	62.32	N/A	172.06	N/A

**Summary of Significant Outage Events**  
**(Significant contribution to CKAIFI is >=.1 or for CKAIDI is >= 30 min)**

**Circuit 56-63F6**

Date	Year	Protective Device Type	Protective Device Pole	Protective Device Town	Cause	Failed Component	Classification	SAIFI	SAIDI (min)
03/07/2016	2016	Recloser	P2-50 PLAIN MEETINGHOUSE	WEST GREENWICH	Other Company Activities	No failure or Unknown	Main line - overhead	0.182	0.72
09/15/2017	2017	Recloser	P18 NOOSENECK HILL	EXETER	Vehicle	Conductors	Main line - overhead	0.401	34.3
11/01/2017	2017	Recloser	P2-50 PLAIN MEETINGHOUSE	WEST GREENWICH	Tree - Broken Limb	No failure or Unknown	Main line - overhead	0.184	8.7
12/10/2017	2017	Recloser	P18 NOOSENECK HILL	EXETER	Control Trouble	No failure or Unknown	Main line - overhead	0.398	2.63
09/09/2018	2018	Recloser	P18 NOOSENECK HILL	EXETER	Vandalism	Pole - wood	Main line - overhead	0.399	20.17
09/27/2018	2018	Recloser	P280 TEN ROD	EXETER	Lightning	Conductors	Main line - overhead	0.233	21.96
10/16/2018	2018	Recloser	P280 TEN ROD	EXETER	Tree Fall	Conductors	Main line - overhead	0.137	24.39
11/22/2018	2018	Recloser	P280 TEN ROD	EXETER	Tree Fall	Conductors	Main line - overhead	0.138	17.06
02/26/2019	2019	Recloser	P2-50 PLAIN MEETINGHOUSE	WEST GREENWICH	Tree Fall	Pole - wood	Main line - overhead	0.185	66.56
09/30/2019	2019	Station breaker	Circuit Breaker	WEST GREENWICH	Vehicle	Pole - wood	Main line - overhead	1.071	53.21
10/11/2019	2019	Recloser	P9 BAKER PINES	RICHMOND	Tree - Broken Limb	No failure or Unknown	Main line - overhead	0.139	6.18
10/30/2019	2019	Recloser	P60 VICTORY	EXETER	Tree - Broken Limb	No failure or Unknown	Main line - overhead	0.5	38.55
12/17/2019	2019	Station breaker	Circuit Breaker	WEST GREENWICH	Tree - Broken Limb	No failure or Unknown	Main line - overhead	0.963	31.93
03/23/2020	2020	Recloser	P2-50 PLAIN MEETINGHOUSE	WEST GREENWICH	Device Failed	Tap	Main line - overhead	0.184	34.77
04/09/2020	2020	Recloser	P2-50 PLAIN MEETINGHOUSE	WEST GREENWICH	Device Failed	Overhead Device Other	Main line - overhead	0.184	14.42
04/15/2020	2020	Recloser	P280 TEN ROD	EXETER	Device Failed	Overhead Device Other	Main line - overhead	0.138	4.68
05/22/2020	2020	Recloser	P280 TEN ROD	Vehicle	Pole - wood	T or D Supply - below 69 KV	Main line - overhead	0.138	10.39
08/07/2020	2020	Station breaker	Circuit Breaker	WEST GREENWICH	Vehicle	Pole - wood	T or D Supply - below 69 KV	0.981	3.12
10/31/2020	2020	Recloser	P9 BAKER PINES	RICHMOND	Tree - Broken Limb	No failure or Unknown	Main line - overhead	0.141	0.45

			P18 NOOSENECK HILL	EXETER	Tree - Broken Limb	No failure or Unknown	Main line - overhead	0.404	9.42
11/23/2020	2020	Recloser							
12/01/2020	2020	Fused disc - branch	P24 HUDSON POND	WEST GREENWICH	Tree - Broken Limb	Conductors	Fused branch - overhead	0.059	43.35

## COMPLETED WORK

Work request numbers 30329643 and 30329678 installed feeder monitors.

## PENDING WORK

Work request numbers 30329675 and 30329672 will install feeder monitors.

## RECOMMENDATIONS

### SHORT TERM

Due to the low cost of the short term recommendations, no alternative analysis is considered. The recommended plan is the least cost option. Benefits for the short term recommendations are shown in the reliability tables on page 1.

**Tree Trimming:** **Not Recommended**

Tree trimming was last completed on this circuit in FY2020 and is scheduled to be trimmed again in FY2024.

**Infrared Circuit Scan:** **Recommended**

IR scanning was last completed on this circuit in FY2015. An IR scan is recommended.

**Animal Mitigation:** **Not Recommended**

No animal mitigation is recommended at this time.

**Fault Indicators:** **Not Recommended**

No fault indicators are recommended at this time.

**Load Balancing:** **Not Recommended**

Neutral current was calculated to be 35.8A, which is 14.6% of relay safe carry.

**Cutout Mounted Recloser Installations:** **Not Recommended**

No cutout mounted reclosers are recommended at this time.

**Line Recloser Installations (include Form3s):** **Not Recommended**

No line recloser installations are recommended at this time.

**Additional Circuit Sectionalizing:** **Recommended**

Install a loadbreak switch on P40 Plain Meetinghouse Rd, West Greenwich.

**Additional Feeder Ties/Reconfiguration:** **Not Recommended**

No additional feeder ties or reconfigurations are recommended at this time.

**Protective Device Coordination Review:** **Not Recommended**

Protective device coordination was reviewed in spring 2020.

**Other Recommendations:** **Not Recommended**

No other recommendations were identified.

## Short Term Recommendation – Cost Summary

Funding Project #	STORMS Code	Title/Description	\$ Cap	\$ O&M	\$ Rem	\$ Total
TBD	ERR2021RI	Loadbreak switch P40 Plain Meetinghouse Rd	24k	1k	0	25k

## LONG TERM SYSTEM IMPROVEMENTS

### Project Description:

No long term system improvements are recommended at this time.

## CONSIDERATIONS FOR ACTIVE/PENDING STUDIES

### Project Description:

This circuit is included in the Central RI West area study that is currently being performed. The new feeder out of the Weaver Hill MITS substation (proposed in the Central RI West area study) will pick up a large portion of 63F6 load.

# Memorandum

To: Eric Wiesner / Ryan Constable  
From: John Williams  
Date: August 8, 2022  
Subject: Problem and Poor Performing Reliability Review for feeder Warwick 52F3

This memo documents the recommendations to improve both CKAIFI and CKAIIDI on the RI Energy Warwick 52F3 Circuit.

## RELIABILITY PERFORMANCE

The following table shows the historic reliability performance and the predicted improvement after recommendations in this document are completed.

TNECo System SAIDI					TNECo System SAIFI					Estimated Improvements after Work is Completed					
FEEDER	Cs	Construction Type	Combined 5 yr CKAIIDI & CKAIFI Ranking	Historic CKAIIDI Performance (Min)					Historic CKAIFI Performance					Short Term Work	Long Term Work
56-52F3	2674	OH	82	2021	2020	2019	2018	2017	2021	2020	2019	2018	2017	0.11	0.37
				30.0	95.3	51.1	20.8	52.5	1.10	1.29	0.44	0.22	0.37		

### Summary of finding.

The interruption history for the past five years was reviewed with input from Operations and local Arborist, Animal and tree contacts were the main cause of the outages, particularly in the vicinity of Warwick Neck Rd. Certain customers off Warwick Neck Road have experienced an average of 3 interruptions per year over five years (including major storms). Overall, the circuit had a higher than average frequency performance (CKAIFI) for the previous two years. The recommended work is focused on reducing tree contact risks. Animal contact interruptions have significantly declined since 2018 due to improvements on Rocky Point Ave and Mill Cove Rd.

### Recommended Work.

Reconductor 2,100 ft of 1/0 Al, PE wire on crossarm with 1/0 AL SPCA from p 45 Warwick Neck Rd to p 4 Randell Ave. There have been 11 events on this heavily treed line tap, including major storms, in the previous 5 yrs. Estimated capital costs is \$ 120,000.

Reconductor 1,400 ft of 1/0 Al black SPCA w/ 1/0 CU messenger with 3 -1/0 Al crossarm built for coastal construction from p 87 to p 99 Warwick Neck Rd.. The existing SPCA wire covering has cracks and bare spots in these sections. Estimated capital cost \$ 80,000

Install 3 lightning arrestors at p 11 Narragansett Bay Ave.

At p 17 Samuel Groton Ave, transfer C phase tap to B phase, refuse line cutout to 65K.

Perform spot trimming at p 101 and 110 ½ Warwick Neck Ave and p 19 and 29 Narragansett Ave. Locations have been forwarded to the local arborist.

**Summary of Significant Outage Events**  
**(Significant contribution to CKAIFI is >=.1 or for CKAIDI is >= 30 min)**

**Significant Circuit Events - 52F3 -**

Date	Device Location	Town	Dav Type	Cause	Estimated CKAIFI	Estimated CKAIDI (min)	Comments
30-OCT-17	56-52F3: A: Station Brkr	WARWICK	Major Storm	Other Company Activities	0.32	7.28	Loss of Supply at Drumrock -October Windstorm
11-JUN-21	56-52E3: A: Station Brkr	WARWICK	Blue Sky	Device Failed	1.00	73.60	Loss of Supply, Drumrock Sub Relay Failure
27-OCT-21	56-52F3: A: Station Brkr	WARWICK	Major Storm	Tree Fell	0.47	420.53	Tree at p 10 Warwick Neck, Broken crossarm
02-MAR-18	56-52F3: CGFB: P 18 Leroy Ave	WARWICK	Major Storm	Tree Fell	0.02	100.31	Winter Storm Riley
04-AUG-20	56-52F3: CGF: P 37 Warwick Neck Ave	WARWICK	Major Storm	Device Failed	0.05	70.04	Tree at p 11 Tiffany
02-MAR-18	56-52F3: CGI: P 45 Warwick Neck Ave	WARWICK	Major Storm	Tree Fell	0.03	112.98	Winter Storm Riley
11-MAR-17	56-52F3: CGIC: P 56 Warwick Neck Ave	WARWICK	Blue Sky	Unknown	0.14	16.08	SPCA cable - A Phase burnt off p 92 Warwick Neck Rd.
29-OCT-17	56-52F3: CGIC: P 56 Warwick Neck Ave	WARWICK	Major Storm	Tree Fell	0.14	536.76	p3 Nightingale St. Wires Down - October Wind Storm
02-MAR-18	56-52F3: CGIC: P 56 Warwick Neck Ave	WARWICK	Major Storm	Tree - Broken Limb	0.04	63.34	Winter Storm Riley
19-AUG-19	56-52F3: CGIC: P 56 Warwick Neck Ave	WARWICK	Blue Sky	Tree Fell	0.14	22.48	Broken Crossarm p 85 Warwick Neck
17-OCT-19	56-52F3: CGIC: P 56 Warwick Neck Ave	WARWICK	Major Storm	Tree - Broken Limb	0.04	71.31	Tree Branch p 90 Warwick Neck Rd
01-NOV-19	56-52F3: CGIC: P 56 Warwick Neck Ave	WARWICK	Major Storm	Unknown	0.13	29.52	SPCA cable - wire down p 95 Warwick Neck Rd.
04-AUG-20	56-52F3: CGICB: Narragansett Bay Ave	WARWICK	Major Storm	Unknown	0.01	34.49	TS Isaias
06-AUG-20	56-52F3: CGIC: P 56 Warwick Neck Ave	WARWICK	Blue Sky	Tree Fell	0.13	12.07	P 65 Warwick Neck TS Isaias
29-OCT-17	56-52F3: E: P 4 Samuel Gorton Ave	WARWICK	Major Storm	Tree - Broken Limb	0.53	1317.01	Tre p 35 Palmer St - October Wind Storm
15-SEP-20	56-52F3: E: P 4 Samuel Gorton Ave	WARWICK	Blue Sky	Tree - Broken Limb	0.54	22.75	Tre p 30 Palmer Ave
22-AUG-21	56-52F3: E: P 4 Samuel Gorton Ave	WARWICK	Major Storm	Tree Fell	0.54	242.09	TS Henri
27-OCT-21	56-52F3: E: P 4 Samuel Gorton Ave	WARWICK	Major Storm	Tree Fell	0.54	494.01	Multiple Tree issues
18-FEB-22	56-52F3: E: P 4 Samuel Gorton Ave	WARWICK	Blue Sky	Tree - Broken Limb	0.54	82.88	Tree issues related to rain storm
04-SEP-20	56-52F3: FB: Seareast Lin	WARWICK	Blue Sky	Insulation failure - cable	0.16	8.86	URD Cable fault
04-AUG-20	56-52E3: HE: P 18- 50 Tidewaterer	WARWICK	Major Storm	Tree Fell	0.07	71.41	TS Isaias

There were 21 significant interruption events on the circuit since January of 2017, 11 occurred along circuit branch CG, Warwick Neck Rd .

**All Events:**

Since January of 2017 the circuit had 136 events, 98 have occurred during Blue Sky Days. The remainder were during excludable weather events. The circuit's frequency performance was driven by trees and animal contacts. Duration performance was driven by tree events, accounting for 90 % of all customer minutes interrupted on the circuit. See Tie Map of Warwick 52F3, Chart 1, and 2 below.

Tie Map 52F3 - Warwick RI

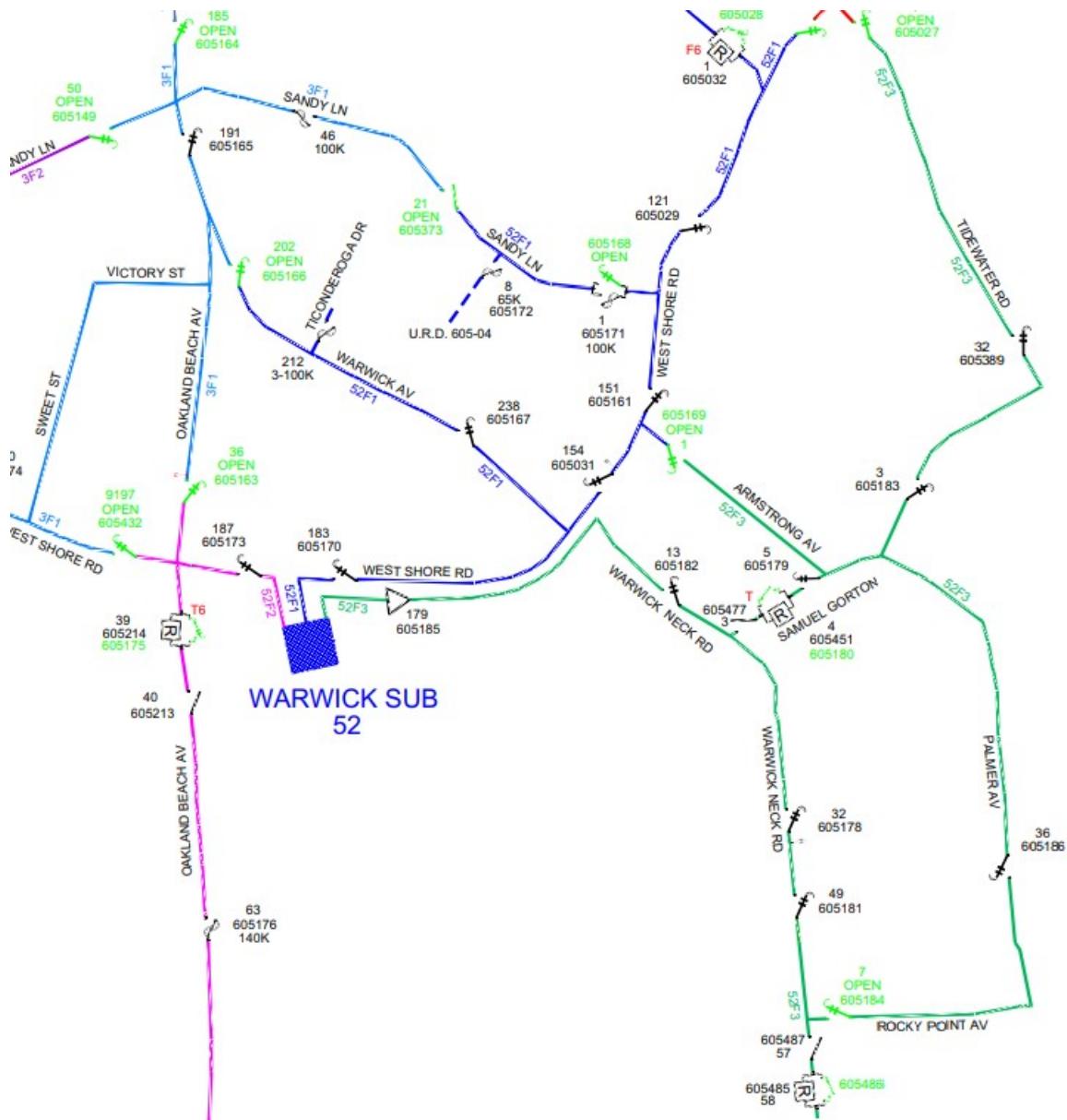


Chart 1 Frequency Performance cause drivers.

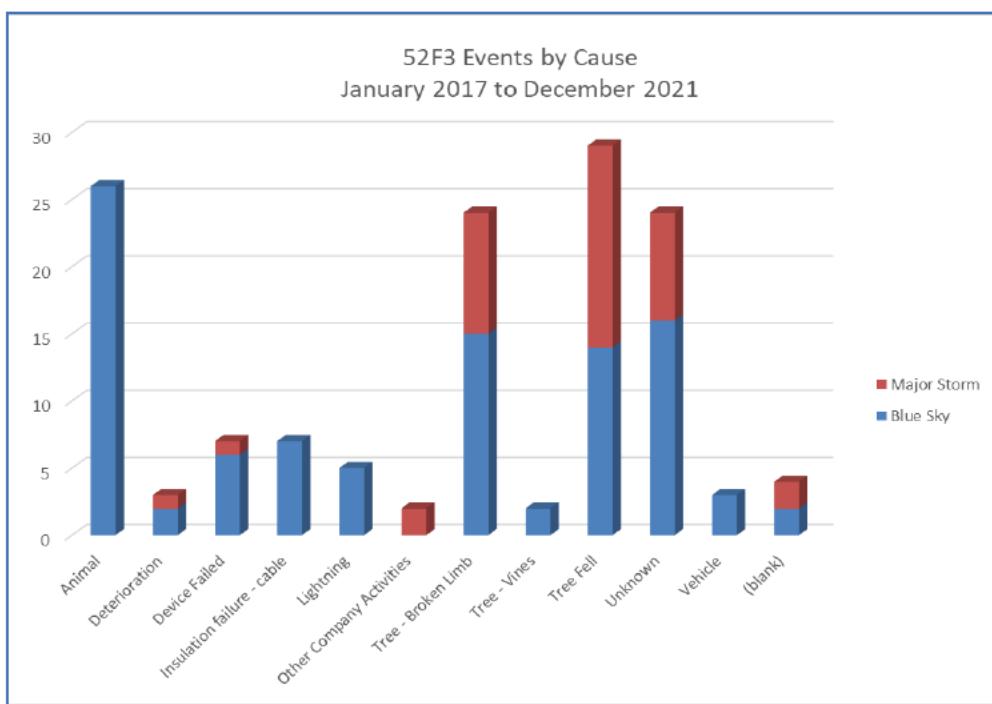
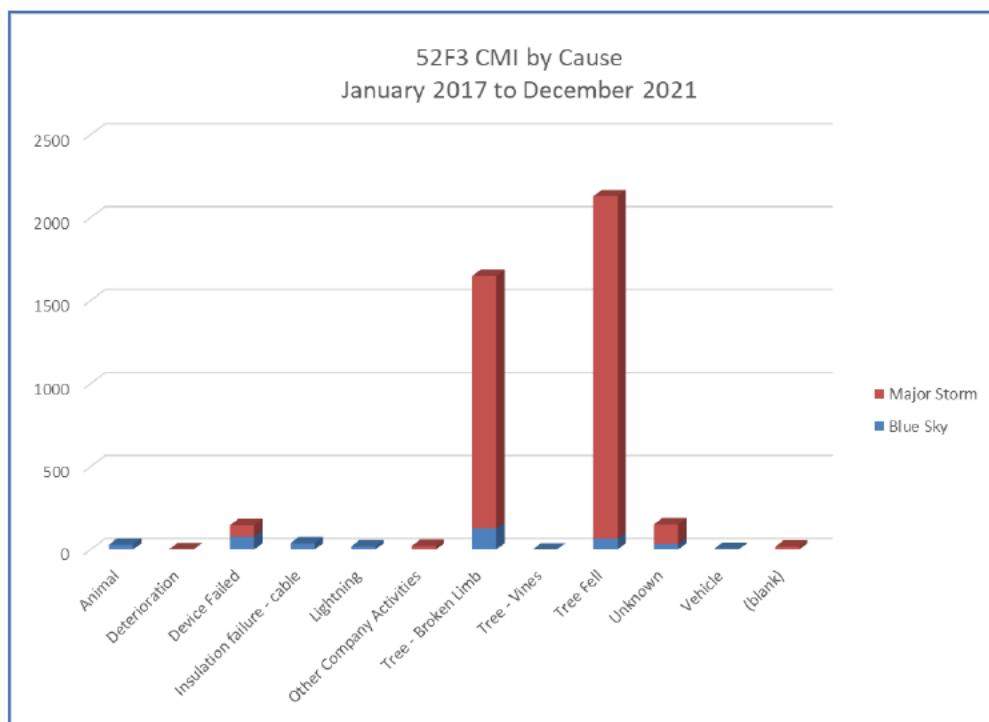


Chart 2 Duration Performance cause drivers.



## COMPLETED WORK

Since 2019 there have been 26 reliability related projects completed on the Warwick 52F3 circuit.  
Total spend for these projects is \$121,700,

Completed Reliability Work on the 52F3 Since 2019		
Budget Item	Work Requests	Total Costs
<b>Cutout Mnted Recloser Program RI</b>	<b>1</b>	<b>\$24,986</b>
P45 Warwick Neck Ave, Warwick - Install (3) CMR's for Newton Ave, Upgrade Pole	1	\$24,986
<b>I&amp;M - OS D-Line OH Work From Insp.</b>	<b>5</b>	<b>\$17,249</b>
52F3 priority Level 9 Computapole inspection WR for overhead - 1 locations.	2	\$6,853
52F3 priority Level 9 Computapole inspection WR for overhead - Cromwell	1	\$4,085
52F3 priority Level 9 Computapole inspection WR for overhead - Carlton	1	\$1,220
52F3 priority Level 9 Computapole inspection WR for overhead - HOLTON DR	1	\$5,091
<b>IE - OS Dist Transformer Upgrades</b>	<b>1</b>	<b>\$2,941</b>
Replace 25 KVA Xfmr W/ 50 KVA Xfmr, Repalce Ground Rod.	1	\$2,941
<b>Ocean St-Dist-Asset Replace Blknt</b>	<b>7</b>	<b>\$19,373</b>
Distribution Electric Asset Replacement	1	\$2,218
Distribution Electric Asset Replacement dm	1	\$894
P38 & P38-84 Palmer Ave (Warwick) must be replaced asap	1	\$3,986
P6-1 Wentworth Ave is rotted at the base and requires replacement	1	\$529
REPLACE CONDEMNED P10 & P11 & REPLACE 25KVA W/ 50KVA TRANSFORMER	1	\$8,462
Replace JO P3 (30/3) W/ JO 35/3, Rake and Brace new P3.	1	\$1,963
Rmve Tree Guy, Inst Pole #62-84 35/3, Inst Pole to Pole Guy, inst SW Anchor Guy.	1	\$1,321
<b>Ocean St-Dist-Damage&amp;Failure Blknt</b>	<b>8</b>	<b>\$18,570</b>
Cable Fault, 10/3/20, Harborview Dr, Warwick, RI, Fdr#52F3	1	\$1,209
Cable Fault, 10/3/20, Pole 48-50, Tidewater Dr, Warwick, RI, Fdr#52F3	1	\$1,209
Cable Fault, 9/29/20, Tidewater Dr, Warwick, RI Fdr#52F3	1	\$1,209
Cable Fault, 9/4/20, Pole 48-50, Tidewater Dr, Warwick, RI, Fdr#52F3	1	\$1,209
Replace Damaged JO P46 (40/3) w/ JO 40/3	1	\$3,034
Replace P12-3 (35/3) w/ 35/3, Remove Pole to Tree Guy, Install new anchor guy.	1	\$1,409
Replace Pole 6 Ocean Ave with 40'3 same location/ Corner of payton Ave	1	\$4,142
Rplce JO P34 w/ 35/3 Pole, Rplce Anchor Guy, Rplce P33 w/ 40/3, Rplce Xfmr @ P33	1	\$5,149
<b>Ocean St-Dist-Load Relief Blanket.</b>	<b>1</b>	<b>\$2,537</b>
Replace 10 KVA Xfmr W/ 25 KVA Xfmr @ P12-1	1	\$2,537
<b>Ocean St-Dist-Reliability Blanket.</b>	<b>2</b>	<b>\$29,661</b>
In-line disconnects for P4 recloser. See viper betterment WR 29655388	1	\$5,693
Replace P1 40/3 w/ a 45/1 (H1) Pole, Replace Airbreak w/ new Loadbreak @ P1.	1	\$23,968
<b>Viper Recloser Replacement Pgm 1-RI</b>	<b>1</b>	<b>\$6,360</b>
P5 Samuel Gorton Ave, Warwick - Recloser betterment project.	1	\$6,360
<b>Totals</b>	<b>26</b>	<b>\$121,677</b>

## PENDING WORK

Work in the STORMS queue that is waiting for permitting, scheduling, or in construction.

Pending work requests in Status 40, 50, or 60		
Budget Item	Work Request #	Total Costs
<b>Covid Scenario Analysis Work RI</b>		<b>\$92,265</b>
52F3 - P179 W Shore Rd (Repl LB device) - P17 Samuel Gorton (Repl Cutout).	30503498	\$17,991
P56 Warwick Neck Ave Warwick - Replace 100k fused cutouts with Recloser	30406805	\$74,274
<b>I&amp;M - OS D-Line OH Work From Insp.</b>		<b>\$5,350</b>
52F3 priority D2C Computapole inspection WR for overhead - 4 locations.	27929861	\$5,350
<b>LightHouse URD Cable Replacement</b>		<b>\$39,709</b>
Lighthouse Estate Cable-in-Conduit replacement (2-2")	30173509	\$39,709
<b>Ocean St-Dist-Asset Replace Blknt</b>		<b>\$8,510</b>
Open Wire Secondary Replacement	28427499	\$954
Replace Open Wire Sec. - Distribution Electric Asset Replacement	28435405	\$1,928
REPLACE OPEN WIRE SECONDARY FROM POLE 1 TO POLE 3 WITH 1/0 TRIPLEX	28436563	\$1,740
Replace P11 River Vue Ave w/ 40c3 Upgrade Xfmr w/ 50kva	30575207	\$3,888
<b>Ocean St-Dist-Damage&amp;Failure Blknt</b>		<b>\$36,650</b>
12/12/21 Pole 23 Randall Ave Warwick RI. Fdr 52F3-Normal Design	30507887	\$3,270
Expedited Design 8/18/21 Pole 46 Rocky Pt Pk Warwick RI Fdr#52F3	30441505	\$7,815
Rplce P3 (40/3) W/ 45/2 Pole, Rplce Fx'd 900 KVAR Cap Bank W/ Adv 900 KVAR	30066595	\$25,565
<b>Ocean St-Dist-Reliability Blanket.</b>		<b>\$22,380</b>
Replace Loadbreak @ P3, Replace 40/3 pole w/ 45/1 (H1) Pole.	29867225	\$22,380
<b>Grand Total</b>	<b>12</b>	<b>\$204,864</b>

A recloser recommended at p 56 Warwick Neck Rd, WR # 30503498, was recently placed in service. Repairs to the Seacrest Ln URD (fused at p 48-50 Tidewater Dr) were completed in 2022.

## **RELEASE LIST**

The 52F3 does not have equipment on the System Operator's release report.

## **RECOMMENDATIONS**

### **SHORT TERM**

Due to the low cost of the short-term recommendations, no alternative analysis is considered. The recommended plan is the least cost option. Benefits for the short term recommendations are shown in the reliability tables on page 1.

#### **Tree Trimming:**

Spot Trimming recommended at p 101 and 110 ½ Warwick Neck Ave and p 19 and 29 Narragansett Ave have been forwarded to the local arborist.

#### **Infrared Circuit Scan:**

Last IR scan 2018. An IR scan by the Worcester Lab is scheduled for 2022.

#### **Animal Mitigation:**

Not recommended. Animal contact events have been substantially reduced since 2018

#### **Fault Indicators:**

Not Recommended

#### **Load Balancing:**

Load balancing is recommended. Neutral current is more than 1/3 the ground pick up, At peak loads C phase is 100 amps higher than B.

At p 17 Samuel Groton Ave, transfer C phase tap to B, refuse line cutout to 65K.  
This will transfer approx.. 25 amps from C to B phase.

#### **Cutout Mounted Recloser Installations:**

Additional CMRs are not recommended

#### **Line Recloser Installations (include Form3s):**

Additional PTRs are not recommended

#### **Additional Circuit Sectionalizing:**

Not Recommended

#### **Additional Feeder Ties/Reconfiguration:**

Not Recommended.

#### **Protective Device Coordination Review:**

Not recommended

**Other Recommendations:**

Reconductor 2,100 ft of 1/0 AL, PE wire on crossarm with 1/0 AL SPCA from p 45 Warwick Neck Rd to p 4 Randell Ave. There have been 13 events on this heavily treed line tap, including major storms, in the previous 5 yrs. Estimated capital costs is \$ 120,000..

Reconductor 1,400 ft of 1/0 AL black SPCA w/ 1/0 CU messenger cable with 3 -1/0 AL crossarm built for coastal construction from p 87 to p 99 Warwick Neck Rd. The existing SPCA installation has cracks and bare spots.

Install 3 lightning arrestors at p 11 Narragansett Bay Ave.

**Short Term Recommendation – Cost Summary**

Funding Project #	STORMS Code	Title/Description	\$ Cap	\$ O&M	\$ Rem	\$ Total
	ERR_2022_RI	Reconductor 2,100 ft of SPCA along Newton and Belcom Ave(s)	\$ 120,000	\$ 5,000	\$ 10,000	\$ 135,000
	ERR_2022_RI	Reconductor 1,400 ft of SPCA Warwick Neck Rd	\$ 80,000	\$ 5,000	\$ 5,000	\$ 90,000
	ERR_2022_RI	Install 3 lightning arrestors at p 11 Narragansett Bay Ave.		\$1,500		\$ 1,500

**LONG TERM SYSTEM IMPROVEMENTS**

**Project Description:**

Describe...

**Alternative 1:**

Describe...

**Alternative 2**

Describe...

**Long Term Recommendation – Cost Summary**

Funding Project #	STORMS Code	Title/Description	\$ Cap	\$ O&M	\$ Rem	\$ Total
	ERR2019RI					

--	--	--	--	--	--	--	--

STORMS Project codes for both the Short Term & Long Term Projects listed above have been set up in STORMS and assigned as the indicated in the above tables.

## **CONSIDERATIONS FOR ACTIVE/PENDING STUDIES**

### **Project Description:**

Describe...

The Narragansett Electric Company  
d/b/a Rhode Island Energy

In Re: Proposed FY 2024 Electric Infrastructure, Safety and Reliability Plan  
21-Month Filing: Period April 2023 – December 2024  
Responses to the Division's Second Set of Data Requests  
Issued on November 17, 2022

---

Division 2-2

Request:

Describe in detail the Company's proposed CEMI-4 program. Explain the relationship between targeted improvements under a CEMI-4 program and overall system reliability and provide supporting statistical data. Is the Company considering CEMI performance during only blue-sky conditions (excluding Major Event Days)?

Response:

The Company explains the relationship between targeted improvements under the CEMI 4 program and system reliability below. However, this comparison is not appropriate. The purpose of the CEMI metric is not to impact overall system reliability but is designed to identify and fix reliability issues for customers who are experiencing significantly poorer service than the average customer.

Including major storms, the average Rhode Island Energy Customer experiences 1.49 interruptions. Table 1 lists the system SAIFI performance, the number of events, and the customers interrupted (“CI”) for the previous three years.

*Table 1. RI Energy SAIFI with and without Major Storms.*

RI Energy SAIFI with and without Major Storms							
Year	Customers Served	Regulatory Reported SAIFI			SAIFI Including Major Storms		
		Events	CI	SAIFI	Events	CI	SAIFI
2019	496,961	2,711	508,130	1.02	4,587	689,698	1.38
2020	498,157	2,721	471,406	0.95	5,427	826,935	1.66
2021	499,886	2,911	477,691	0.96	5,008	720,516	1.44
Averages	498,335	2,781	485,742	0.98	5,007	745,716	1.49

However, reliability performance across the entire system is uneven. As seen in Table 2, 11.46% or approximately 57,100 customers, experience 4 or more interruptions annually. Further, 1.7%, more than 8,300 customers, experience 7 or more interruptions annually.

*Table 2. RIE CEMI n, IEEE calculation, Storms included.*

Year	Cs	CEMI 3+	CEMI 4+	CEMI 5+	CEMI 6+	CEMI 7+
2019	496,961	19.81%	11.09%	5.63%	3.71%	2.25%
2020	498,157	24.67%	12.94%	6.74%	3.12%	1.66%
2021	499,886	20.63%	10.34%	4.55%	2.45%	1.09%
Averages	498,335	21.70%	11.46%	5.64%	3.09%	1.67%

The Narragansett Electric Company  
d/b/a Rhode Island Energy

In Re: Proposed FY 2024 Electric Infrastructure, Safety and Reliability Plan  
21-Month Filing: Period April 2023 – December 2024  
Responses to the Division's Second Set of Data Requests  
Issued on November 17, 2022

---

Division 2-2, page 2

Reliability investigations using CEMI provide a unique view of the customer's experience that may otherwise go undetected by system (SAIFI) or circuit (CKAIFI) metrics because frequent outages to small groups of customers fail to make a statistical impact. For example, Rhode Island Energy's average distribution circuit serves approximately 1,240 customers. Given SAIFI is 1.49 including major storms, an interruption to a side tap serving 10 customers has a calculated CKAIFI impact of 0.008 (10 customers interrupted / 1240 customers served). Theoretically, with no other interruptions on the circuit, the side tap could open 186 times before CKAIFI reached the system average (1.49 / 0.008).

Rhode Island Energy's Distribution Planning and Asset Management group will compile 3-year CEMI 4+ data on a rolling quarterly basis. A weighted evaluation will be used that appropriately balances chronic CEMI 4+ performance across the 3-year dataset with near term emerging issues. The weighted average CEMI 4+ will be used to prioritize system circuits for further evaluation.

Once the CEMI circuit list is determined, IDS events contributing to each customer's CEMI total will be examined to determine remediation actions. Commonly recommended work is shown in Table 3.

*Table 3. Commonly recommended work:*

Anticipated Menu of Recommended work	
Spot Trimming	Underground cable replacements
EMHT programs	Line fuse
Infrared survey repairs	Cutout Mounted Reclosers
Enhanced lightning protection or covering of splices	GMP recloser
Animal guards	Self healing / FLISR Scheme
OH transformer replacement	Reconductoring bare primary wire with SPCA or Covered Wire
Pole and crossarm replacements	1 Ph line extensions to reduce exposure of long Primary taps

The program's goal is to bring Rhode Island Energy's CEMI 4+ performance to the Edison Electric Institute's first quartile performance of 4.67% within five years. To account for the natural variability of customers on the CEMI 4+ list, work impacting approximately 9,000 customers will be proposed annually. Counting the number of interruptions needed to move customers off the CEMI 4+ list from several sample circuits determined that the average CI saved required to meet program goals is approximately 18,000. Therefore, the program is expected to reduce Company SAIFI by 0.036 (18,000 / 498,355) annually.

The Narragansett Electric Company  
d/b/a Rhode Island Energy

In Re: Proposed FY 2024 Electric Infrastructure, Safety and Reliability Plan  
21-Month Filing: Period April 2023 – December 2024  
Responses to the Division's Second Set of Data Requests  
Issued on November 17, 2022

---

Division 2-2, page 3

Costs:

Six sample locations were reviewed to estimate annual project costs. The estimated capital cost of all projects for the sample locations is \$ 2.6 million. However, some of the costs are expected to be shifted to existing initiatives. Project cash flows are listed in Table 4.

*Table 4. CEMI Program Cash Flows.*

CEMI 4 Program Cash Flows	Cost Type	2023	2024	2025	2026	2027	2028
	Capex	\$820,089	\$1,640,178	\$1,640,178	\$1,640,178	\$1,640,178	\$820,089
	Opex	\$30,003	\$60,006	\$60,006	\$60,006	\$60,006	\$30,003
	Rem	\$33,550	\$67,100	\$67,100	\$67,100	\$67,100	\$33,550

CEMI is a reliability metric that represents the customer experience and therefore, it typically includes major storms.

The Narragansett Electric Company  
d/b/a Rhode Island Energy

In Re: Proposed FY 2024 Electric Infrastructure, Safety and Reliability Plan  
21-Month Filing: Period April 2023 – December 2024  
Responses to the Division's Second Set of Data Requests  
Issued on November 17, 2022

---

Division 2-3

Request:

Provide CEMI in tranches for customers experiencing four or more, six or more, and eight or more sustained interruptions for the previous five years:

- a. Including Major Event Days;
- b. Excluding Major Event Days; and
- c. Excluding Major Event Days and interruptions in the Intentional category.

Response:

Sustained interruptions follow the IEEE definition of one or more customers interrupted for five or more minutes.

**a. Including Major Event Days**

Rhode Island Energy CEMI Performance Including Major Storm Days					
CEMI	CY2017	CY2018	CY2019	CY2020	CY2021
<b>CEMI4+</b>	6.2%	11.3%	11.1%	12.9%	10.3%
<b>CEMI6+</b>	1.0%	3.5%	3.7%	3.1%	2.5%
<b>CEMI8+</b>	0.24%	0.93%	1.44%	1.03%	0.45%

**b. Excluding Major Event Days**

The Company has provided this table to respond to the Division's data request; however, the Company does not recommend using CEMI excluding major events. CEMI is a reliability metric that represents the customer experience, and therefore, it typically includes major storms.

Rhode Island Energy CEMI Performance Excluding Major Storm Days					
CEMI	CY2017	CY2018	CY2019	CY2020	CY2021
<b>CEMI4+</b>	1.7%	3.0%	4.3%	2.9%	3.0%
<b>CEMI6+</b>	0.3%	0.3%	0.8%	0.3%	0.5%
<b>CEMI8+</b>	0.04%	0.02%	0.16%	0.06%	0.05%

The Narragansett Electric Company  
d/b/a Rhode Island Energy

In Re: Proposed FY 2024 Electric Infrastructure, Safety and Reliability Plan  
21-Month Filing: Period April 2023 – December 2024  
Responses to the Division’s Second Set of Data Requests  
Issued on November 17, 2022

---

Division 2-3, page 2

**c. Excluding Major Event Days and Interruptions in the Intentional category**

The Company has provided this table to respond to the Division’s data request; however, the Company does not recommend using CEMI excluding major events. CEMI is a reliability metric that represents the customer experience, and therefore, it typically includes major storms and all interruptions.

Rhode Island Energy CEMI Performance Excluding Major Storm Days and Intentional Interruptions					
CEMI	CY2017	CY2018	CY2019	CY2020	CY2021
<b>CEMI4+</b>	1.3%	3.0%	2.7%	1.4%	2.4%
<b>CEMI6+</b>	0.2%	0.3%	0.6%	0.2%	0.4%
<b>CEMI8+</b>	0.04%	0.02%	0.13%	0.06%	0.00%

The Narragansett Electric Company  
d/b/a Rhode Island Energy

In Re: Proposed FY 2024 Electric Infrastructure, Safety and Reliability Plan  
21-Month Filing: Period April 2023 – December 2024  
Responses to the Division’s Second Set of Data Requests  
Issued on November 17, 2022

---

Division 2-4

Request:

Has the Company historically considered a sustained interruption, for the purposes of reliability performance calculations (SAIDI, SAIFI, CEMI, etc.), as the loss of electric power lasting more than one minute, five minutes, or some other time frame? How does this align with the Company’s definition of CEMI-4 stated as “Customers Experiencing More Than Four Outages of one minute or more in the past year” (page 65)?

Response:

Rhode Island Energy has been following the Rhode Island Public Utilities Commission’s (“PUC”) definition of sustained interruption or interruption event as interruptions of loss of electric power lasting equal to or more than one minute. Year-end SAIFI, SAIDI, and CEMI calculations are based on the PUC’s definition of sustained interruption.

Rhode Island Energy is now also tracking the IEEE definition of SAIFI, SAIDI, and CEMI. IEEE defines a sustained interruption as loss of electric power lasting five or more minutes. Starting this year, Rhode Island Energy aligned with PPL’s practice tracking the CEMI-4 definition as “Customers Experiencing more than four outages of five minutes or more.”

The Narragansett Electric Company  
d/b/a Rhode Island Energy

In Re: Proposed FY 2024 Electric Infrastructure, Safety and Reliability Plan  
21-Month Filing: Period April 2023 – December 2024  
Responses to the Division's Second Set of Data Requests  
Issued on November 17, 2022

---

Division 2-5

Request:

Provide the underlying calculations for system SAIDI and SAIFI for the most recent five years.

Response:

Rhode Island Energy follows Public Utilities Commission criteria to include interruptions in the year-end reliability calculation and uses the IEEE definition of SAIFI and SAIDI to calculate system SAIFI and SAIDI.

Both the formula and the underlying data are summarized in the following tables:

<b>Year</b>	<b>Customers Interrupted</b>	<b>Customers Served</b>	<b>SAIFI Formula</b>	<b>SAIFI</b>
2017	381,604	490,688		0.778
2018	493,729	492,418		1.003
2019	508,889	496,961		1.024
2020	470,725	498,157		0.945
2021	474,133	499,886		0.948

<b>Year</b>	<b>Customer Minutes Interrupted</b>	<b>Customers Served</b>	<b>SAIDI Formula</b>	<b>SAIDI</b>
2017	29,978,803	490,688		61.10
2018	32,572,576	492,418		66.15
2019	33,890,827	496,961		68.20
2020	34,427,034	498,157		69.11
2021	34,390,217	499,886		68.80

The Narragansett Electric Company  
d/b/a Rhode Island Energy

In Re: Proposed FY 2024 Electric Infrastructure, Safety and Reliability Plan  
21-Month Filing: Period April 2023 – December 2024  
Responses to the Division’s Second Set of Data Requests  
Issued on November 17, 2022

---

Division 2-6

Request:

How does the Company currently record and track customer interruptions? Is the Company modifying any methods to record, track and report reliability criteria? Explain.

Response:

Currently, Rhode Island Energy uses the Interruption and Disturbance System (“IDS”) application to record and track customer interruptions. The IDS application collects information from the ABB OMS (Outage Management System). Rhode Island Energy is investigating a new application to replace IDS now that the Company is owned by PPL Rhode Island Holdings, LLC.

The Company is not modifying any methods to report reliability criteria. The Company will continue to follow the Rhode Island Public Utilities Commission (“Commission”) criteria that includes interruptions where one or more customers are interrupted for one or more minutes.

The Company has, and is developing, internal criteria aligned with IEEE SAIDI and SAIFI calculations methods. As compared to the Commission calculation method, the IEEE method considers interruptions where one or more customers are interrupted for five or more minutes. The IEEE criteria are being used when developing new reliability-based programs, setting internal performance goals, and improving the Company’s benchmarking to other utilities. Rhode Island Energy has communicated and will continue to communicate the IEEE-based values and programs with the Division of Public Utilities and Carriers and the Commission. Please see the Company’s responses to Division 1-8 and Division 2-4 for more information.

The Narragansett Electric Company  
d/b/a Rhode Island Energy  
In Re: Proposed FY 2024 Electric Infrastructure, Safety and Reliability Plan  
21-Month Filing: Period April 2023 – December 2024  
Responses to the Division’s Second Set of Data Requests  
Issued on November 17, 2022

---

Division 2-7

Request:

What are the impacts to the Large Projects (Chart 7, page 20) due to proposed GMP implementation?

Response:

The Grid Modernization Plan (“GMP”) impacts the Large Projects as follows:

1. Southeast (a/k/a Dunnell Park): No change with respect to original scope.
2. Dyer Street: Indoor Substation – No change with respect to original scope.
3. Providence Study Projects Phases 1-4: The GMP reinforces the original scope and is expected to expand upon it. Phases 1-4 of the area study propose to rebuild the Admiral Substation. Additionally, the plan calls for the retirement of the Olneyville, Geneva, Harris Avenue, and Rochambeau 4 kV and 11kV Stations. The load from these stations will be converted for 12.47kV operation. Lastly, the plan includes rebuilding the Knightsville 4kV substation with a new modular 23kV to 12.47kV substation with one feeder position.
  - a. This scope enables the following potential GMP projects:
    - i. Install a new (second) modular transformer with a feeder position at the Knightsville Substation.
    - ii. Add two 12.47kV new feeders at the Admiral Substation.
4. Apponaug Substation: The long-term plan is to rebuild the Apponaug Substation. The GMP indicates that the #4 transformer rating should be increased from 11.9MVA to 14MVA. The cost increase would be marginal, and there is no schedule impact to the proposed work. The transformer rating will be further reviewed in design.
5. Phillipsdale Substation: No change with respect to original scope.
6. Centredale Substation: The area study project is to rebuild Centredale Substation. The GMP indicates that the #2 and #3 transformer ratings should be increased from 9.375MVA to 11MVA. The cost increase would be marginal, and there is no schedule impact to the proposed work. The transformer rating will be further reviewed in design.
7. Tiverton Substation: The GMP reinforces the original scope and is expected to expand upon it. The GMP contemplates adding a sixth feeder to the Tiverton Substation.

The Narragansett Electric Company  
d/b/a Rhode Island Energy  
In Re: Proposed FY 2024 Electric Infrastructure, Safety and Reliability Plan  
21-Month Filing: Period April 2023 – December 2024  
Responses to the Division’s Second Set of Data Requests  
Issued on November 17, 2022

---

Division 2-7, page 2

8. Aquadneck Island (Newport projects) Merton Substation Project: The original scope of work per the Newport Area Study called for Merton to be rebuilt as a 23/4.16kV substation. As part of the GMP analysis, Merton instead was converted to a 23/13.8kV substation. This GMP option aligns with Option 2 of the Newport Area Study. The cost increase, in later years of the project, would be approximately \$2.7 million. No schedule impact is anticipated.
9. New Lafayette Substation: No change with respect to original scope. GMP reinforced the need for the New Lafayette feeders.
10. Warren Substation: The GMP reinforces the original scope and is expected to expand upon it. The area study recommends adding two feeders to the existing Warren Substation. The GMP contemplates adding two additional feeders to the Warren Substation.
11. East Providence Substation: The GMP reinforces the original scope and is expected to expand upon it. The area study recommends the build of a new 115/12.47kV substation. The GMP contemplates adding an additional feeder to the East Providence Substation.
12. Nasonville Substation: No change with respect to original scope.
13. Weaver Hill Substation: No change with respect to original scope.

The Narragansett Electric Company  
d/b/a Rhode Island Energy

In Re: Proposed FY 2024 Electric Infrastructure, Safety and Reliability Plan  
21-Month Filing: Period April 2023 – December 2024  
Responses to the Division’s Second Set of Data Requests  
Issued on November 17, 2022

---

Division 2-8

Request:

Provide detailed support for the following statement regarding GMP investments, including a list of current safety and reliability needs, the frequency of occurrence, the cause of the safety or reliability issue, the system and/or customer impact, the Company’s actions to resolve the safety or reliability issue, and the cost:

“These investments need to be deployed as soon as possible to address current and future safety and reliability needs on the Company’s electric distribution system.” (page 23)

Response:

The statement made on page 23 of the Fiscal Year 2024 Electric Infrastructure, Safety, and Reliability (“ISR”) Plan is a qualitative statement explaining the Company’s role in providing safe and reliable electric service and the importance of the Grid Modernization Plan (“GMP”) to that role.

Please see the Company’s responses to Division 1-9, 1-10, 1-12, and 1-22 for an explanation of reliability issues, frequency, cause, customer impact, and costs. These issues center around increases in System Average Interruption Frequency Index (“SAIFI”) and Customers Experiencing Multiple Interruptions (“CEMI”). Please see the Company’s responses to Division 1-23 and 1-33 for an explanation of the immediate and future benefits that can be obtained through the Company’s recommendations.

Specifically on safety needs, the Company does not allow emerging safety issues to occur; so it cannot provide a frequency of occurrence or other requested data. Instead, the Company analyzes the evolving electric system to anticipate potential safety issues and invests accordingly to prevent them. An example of current emerging safety issues is the desensitizing of protection systems as a result of distributed generation. The generation can change arc flash levels as a result of fault current impacts. The following tables demonstrate that, although arc flash levels do not exceed current Personal Protective Equipment (“PPE”) ratings, the distributed generation can desensitize protective devices. Attachment DIV 2-8 contains circuit diagrams for Example 2. The Company believes action should be taken prior to arc flash levels rising beyond PPE ratings and is doing so with the proposed GMP investments.

The Narragansett Electric Company  
d/b/a Rhode Island Energy

**In Re: Proposed FY 2024 Electric Infrastructure, Safety and Reliability Plan**  
**21-Month Filing: Period April 2023 – December 2024**  
**Responses to the Division's Second Set of Data Requests**  
**Issued on November 17, 2022**

---

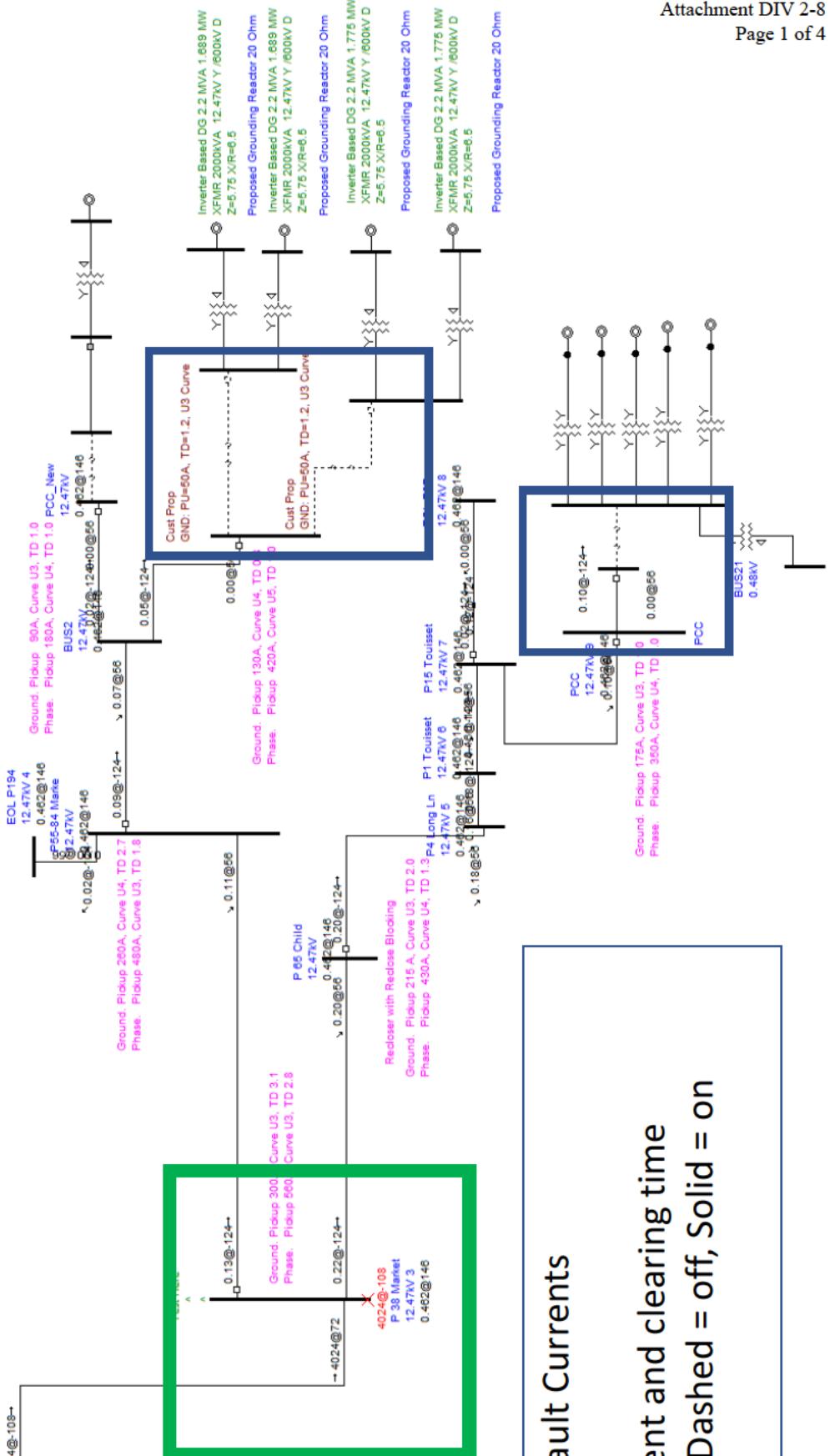
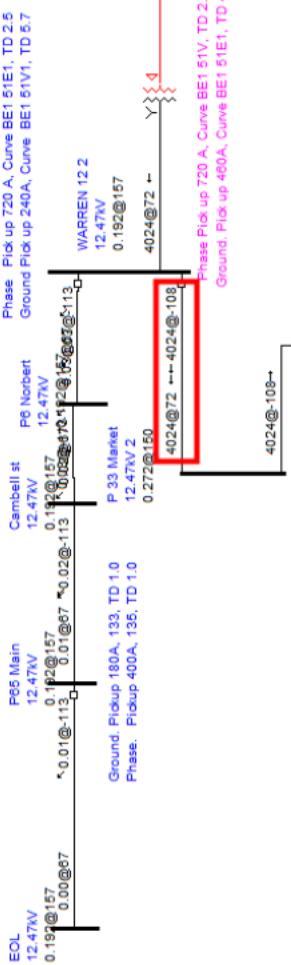
Division 2-8, page 2

**Table 1 – Example 1 - Protective Device Clearing Time and Incident Energy Impacts with Distributed Generation**

Case	Circuit	Bolted Fault (kA)	I (arc) seen by device (kA)	Protective Device Type	Clearing Time (ms)	Incident Energy (cal/cm <sup>2</sup> )	PPE Cal System
Without DG	34F1	1.854	1.849	Recloser	185	0.342	2
With DG	34F1	2.063	1.805	Recloser	190	0.391	2
With DG	34F1	2.063	0.151	Fuse	2000	4.112	8
Without DG	34F3	0.774	0.768	Relay-Controlled Breaker	1035	0.792	2
With DG	34F3	1.099	0.544	Relay-Controlled Breaker	2000	2.177	4
Without DG	46F4	2.288	1.849	Relay-Controlled Breaker	1090	2.489	4
With DG	46F4	2.611	1.594	Relay-Controlled Breaker	1279	3.337	4
With DG	46F4	2.611	0.272	Fuse	2000	5.220	8

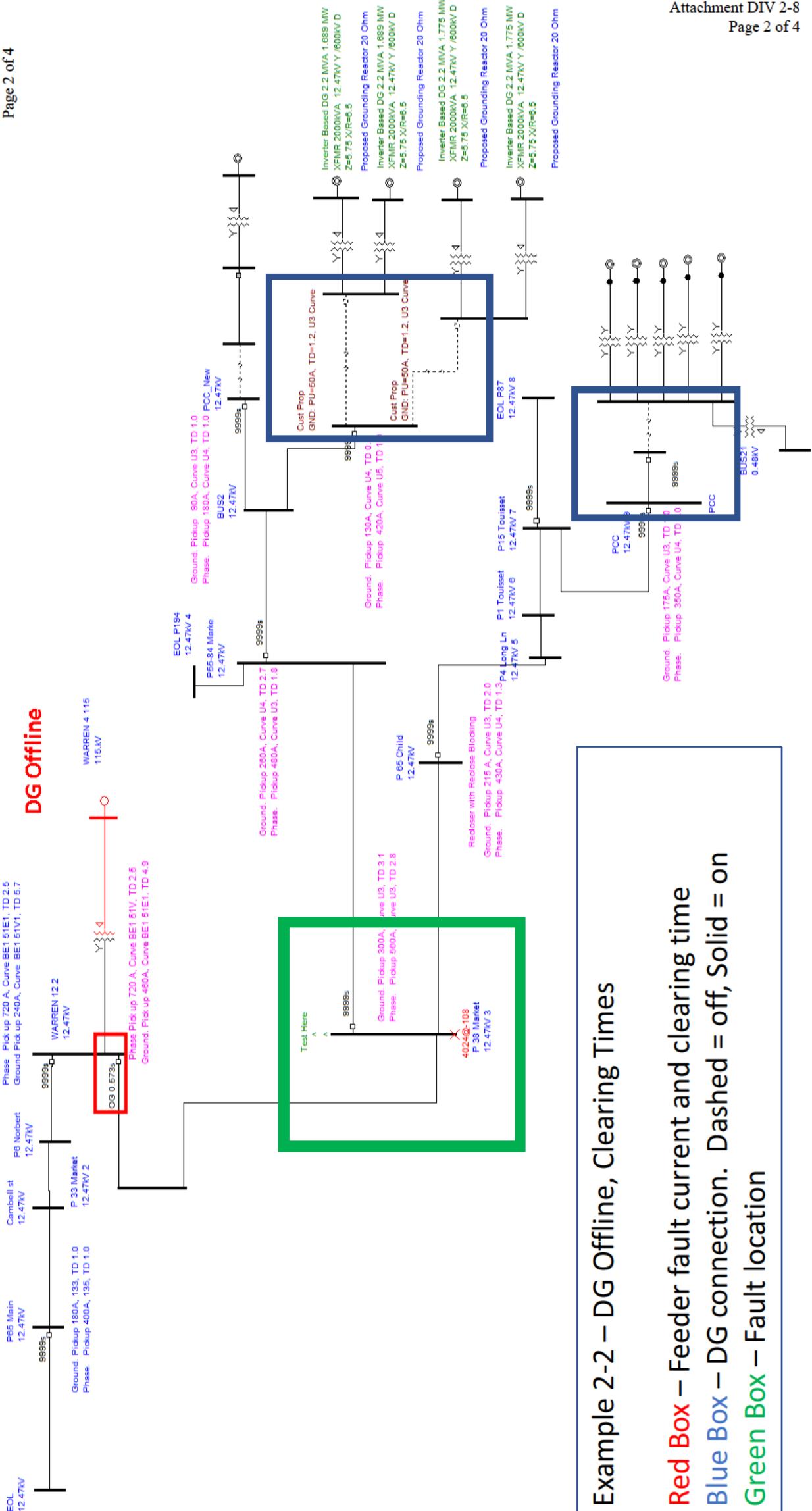
**Table 2 – Example 2 - Protective Device Clearing Time and Incident Energy Impacts with Distributed Generation**

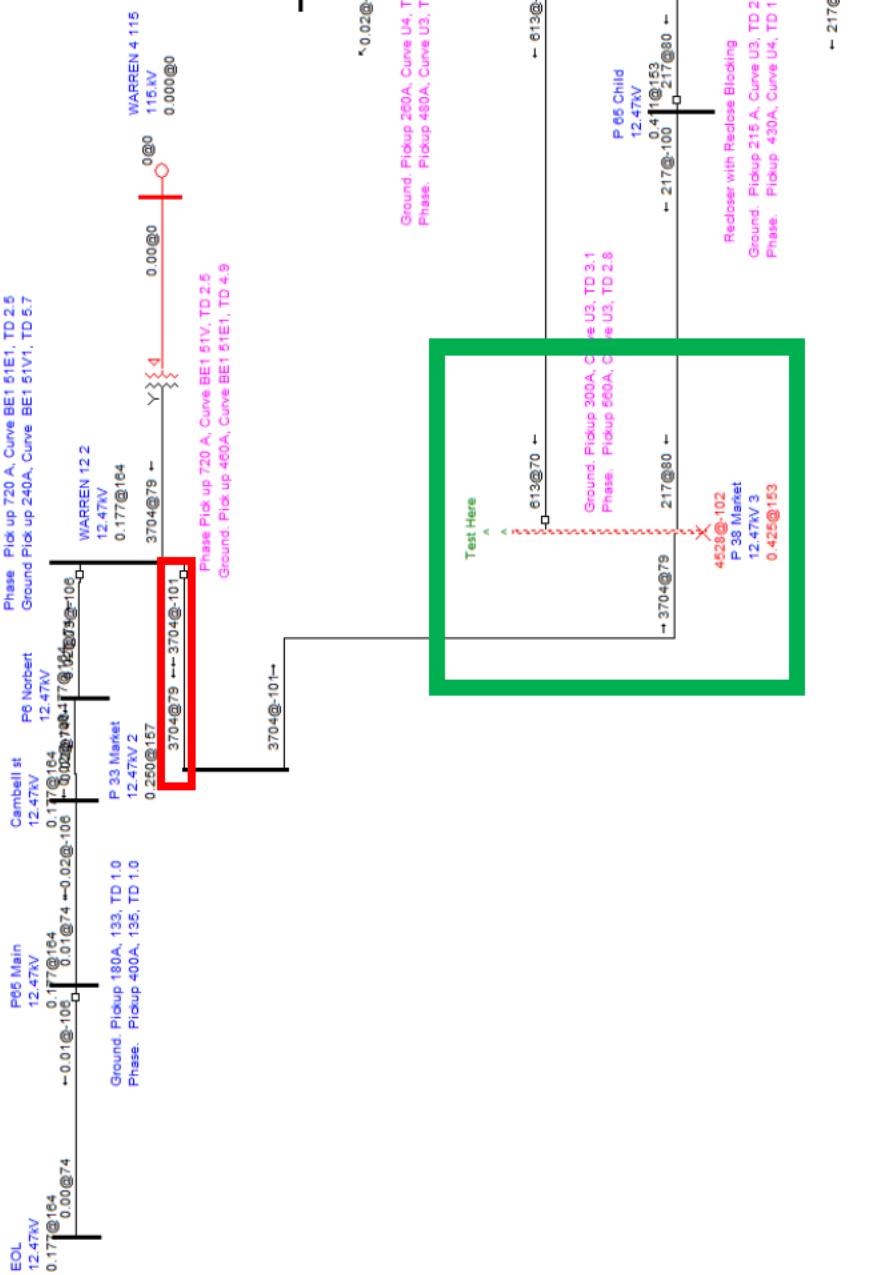
Case	Circuit	Total Fault Current (kA)	Current Seen by Device (kA)	Clearing Time (ms)	Incident Energy (cal/cm <sup>2</sup> )
DG Offline	5F2	4.02	4.02	0.66	2.56
DG Online	5F2	4.53	3.70	0.74	3.34

**DG Offline****Example 2-1 – DG Offline, Fault Currents**

**Red Box** – Feeder fault current and clearing time  
**Blue Box** – DG connection. Dashed = off, Solid = on

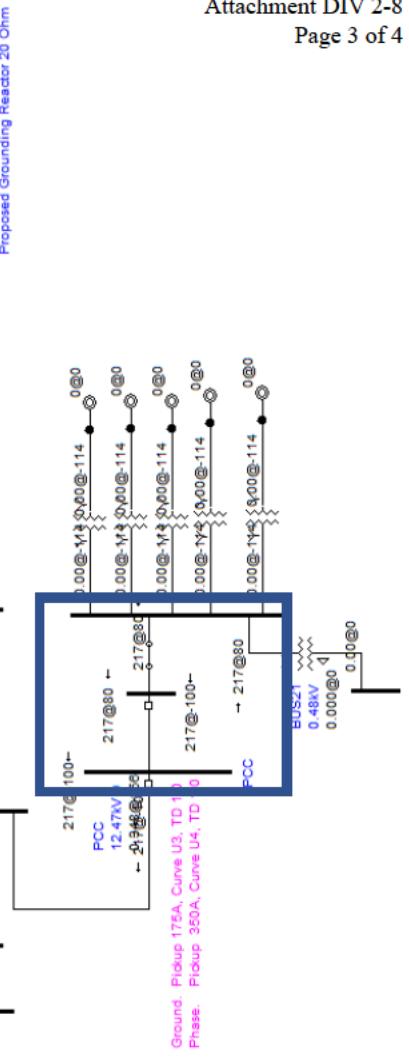
**Green Box** – Fault location

**DG Offline**

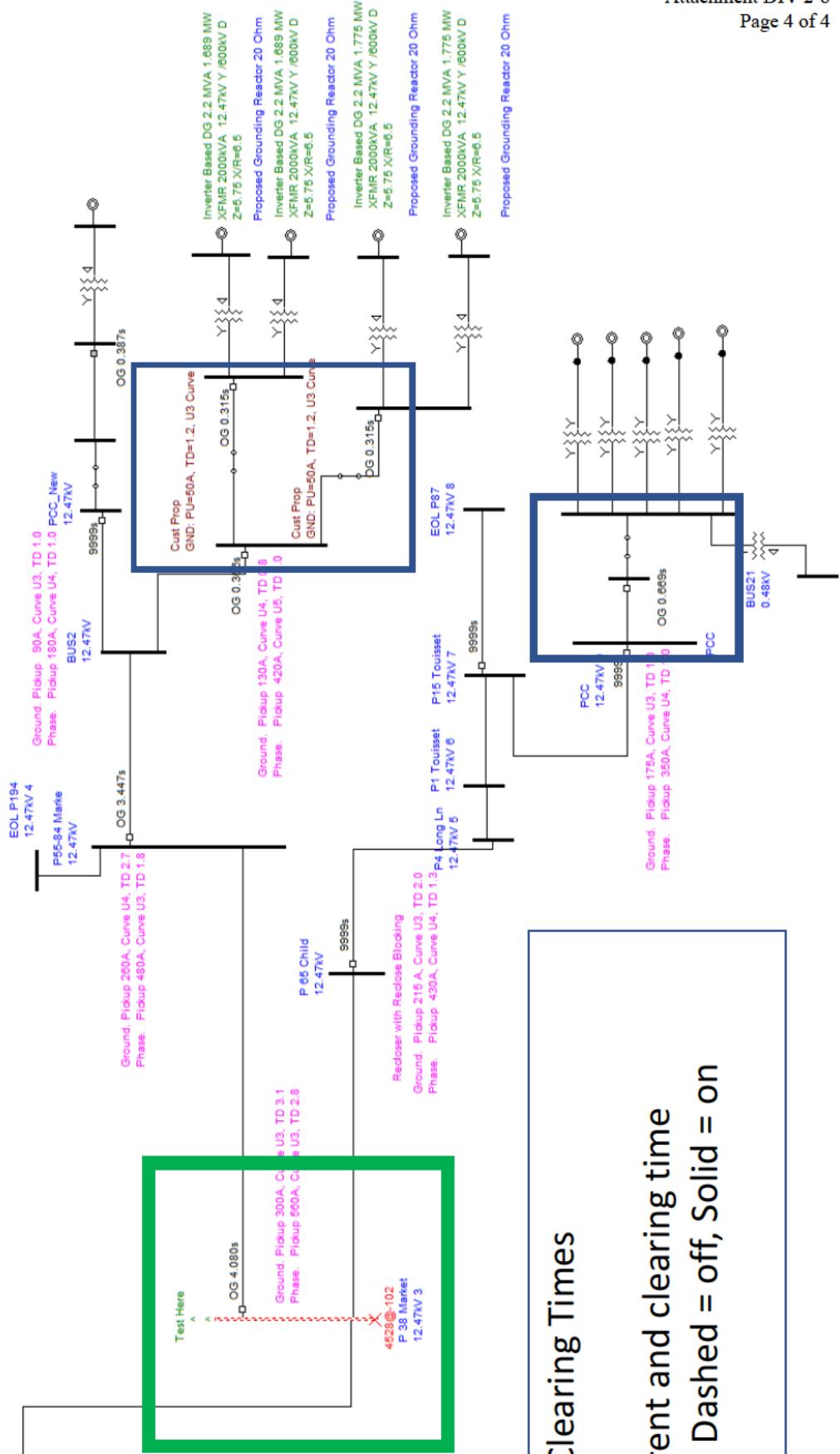
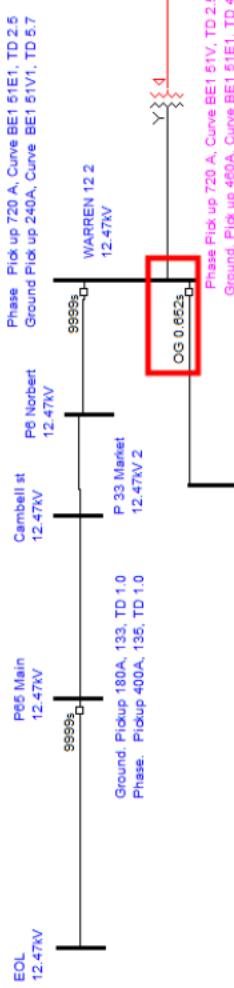
**DG Online****Example 2-3 – DG Online, Fault Currents**

**Red Box** – Feeder fault current and clearing time  
**Blue Box** – DG connection. Dashed = off, Solid = on

**Green Box** – Fault location



## DG Online



**Example 2-4 – DG Online, Clearing Times**

**Red Box** – Feeder fault current and clearing time  
**Blue Box** – DG connection. Dashed = off, Solid = on

**Green Box** – Fault location

The Narragansett Electric Company  
d/b/a Rhode Island Energy

**In Re: Proposed FY 2024 Electric Infrastructure, Safety and Reliability Plan**  
**21-Month Filing: Period April 2023 – December 2024**  
**Responses to the Division's Second Set of Data Requests**  
**Issued on November 17, 2022**

---

Division 2-9

Request:

Provide Chart 9 (page 26) in executable format and expand to include both budgets and actuals for FY12-FY22, and budget and forecast for NGFY23. Please revise the chart to indicate spend for GMP that was approved in previous ISR Plans.

Response:

Please see Attachment DIV 2-9 in Excel format.

In addition to specific projects opened, amounts were reserved to respond to reliability or performance issues that emerged on the system in Fiscal Year 2022 that would require mitigations immediately and could not be attributed to specific distributed energy resource interconnections. For example, overloaded conductor and/or high voltage that could potentially result in equipment damage and/or customer outage.

Budget														
Spending Rationale	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23 Dkt 5209	CY 2023 9 Mos.	CY 2024 12 Mos.
Cust Req/Publ Req	\$21,637	\$20,006	\$16,509	\$14,537	\$15,647	\$19,451	\$21,853	\$19,005	\$27,025	\$24,540	\$26,587	\$27,183	\$20,683	\$28,357
CR/PR - Strategic DER Invts												2,000	650	0
Damage Failure	9,705	10,422	10,050	9,816	11,177	11,467	11,379	13,674	13,505	12,365	12,198	14,251	\$11,651	\$15,878
Grid Modernization	-	-	-	-	-	-	-	-	-	-	-	-	\$36,312	\$50,961
Asset Condition	10,937	11,863	20,242	19,591	24,053	33,880	42,980	29,767	39,675	41,120	40,482	48,290	\$59,962	\$56,152
Non-Infrastructure	278	336	255	277	275	275	553	556	550	580	1,310	1,520	\$1,375	\$1,289
Syst Cap & Perf	15,821	13,913	12,544	21,679	22,148	18,368	23,855	39,765	21,045	21,445	19,999	13,507	\$24,765	\$20,455
SC&P - Strategic DER Invts												1,700	375	0
Total Capital Spending	\$58,378	\$56,540	\$59,600	\$65,900	\$73,300	\$83,441	\$100,620	\$102,767	\$101,800	\$103,750	\$101,600	\$104,750	\$154,748	\$173,092
Actuals and Forecast														
Spending Rationale	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23 Q2 FC	CY 2023 9 Mos.	CY 2024 12 Mos.
Cust Req/Publ Req	\$13,075	\$10,410	\$17,138	\$17,760	\$17,412	\$20,233	\$19,627	\$23,989	\$28,667	\$21,988	\$33,969	\$29,483	-	-
CR/PR - Strategic DER Invts												2	365	121
Damage Failure	12,993	17,515	14,373	3,044	14,531	15,614	19,184	13,999	17,028	19,491	20,200	16,152	-	-
Grid Modernization	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Asset Condition	10,320	8,071	20,905	25,141	27,179	31,274	41,979	32,897	32,877	41,817	35,792	44,891	-	-
Non-Infrastructure	149	2,269	(346)	1,216	457	622	362	673	145	(57)	1,100	898	-	-
Syst Cap & Perf	13,995	11,249	25,973	25,890	19,919	16,372	25,905	39,515	24,958	16,088	15,131	16,061	-	-
SC&P - Strategic DER Invts												1,299	173	0
Total Capital Spending	\$50,532	\$49,514	\$78,043	\$73,051	\$79,499	\$84,114	\$107,058	\$111,072	\$103,676	\$100,627	\$106,730	\$107,607	\$0	\$0

The Narragansett Electric Company  
d/b/a Rhode Island Energy

In Re: Proposed FY 2024 Electric Infrastructure, Safety and Reliability Plan  
21-Month Filing: Period April 2023 – December 2024  
Responses to the Division's Second Set of Data Requests  
Issued on November 17, 2022

---

Division 2-10

Request:

Provide examples and details on what the Company is expecting with respect to supply chain disruptions, schedule delays, and actual costs higher than budget for the current ISR Plan (page 28). How is the Company adjusting the FY24 ISR Plan to account for supply chain disruptions?

Response:

The Company is seeing longer lead times for a variety of materials and has adjusted schedules and business practices to ensure projects are completed on schedule. Project need dates for ISR projects have been maintained because of these adjustments.

Among other items, reclosers and wood poles are two examples where the Company has made execution adjustments. The Company recognized recloser lead times are now eight months. As a result of this, the Company, working with PPL procurement, has locked down approximately 80% of the production slots for the CY 2023 plan and expects to lock down the balance in early January. Similarly, the Company recognized delivery issues with wood poles and found alternative suppliers to ensure adequate stock levels were maintained. The Company is planning for procurement earlier than before to ensure required dates are met. These longer delivery timeframes and costs are being taken into consideration when planning the execution of the proposed FY 2024 Plan.

The Narragansett Electric Company  
d/b/a Rhode Island Energy

In Re: Proposed FY 2024 Electric Infrastructure, Safety and Reliability Plan  
21-Month Filing: Period April 2023 – December 2024  
Responses to the Division’s Second Set of Data Requests  
Issued on November 17, 2022

---

Division 2-11

Request:

Regarding the Company’s statement on page 28:

“In addition to filing Quarterly ISR Plan Reports, the Company has agreed to ongoing collaborative discussions with the Division, including to inform the Division prior to advancing significant (greater than \$1 million) unbudgeted projects during implementation of an ISR Plan as suggested in the February 11, 2021 report of Gregory L. Booth, the Division’s consultant.”

Did RIE inform the Division of the proposed \$1 million for the Recloser – Fast Customer Restoration project introduced in the FY 2023 Q1 review *prior* to committing to recloser purchases and incurring costs?

Response:

Rhode Island Energy determined the reliability need to install mainline reclosers and introduced the spending to the Division of Public Utilities and Carriers (“Division”) at the time the Company filed its Fiscal Year (“FY”) 2023 Electric Infrastructure, Safety, and Reliability (“ISR”) Plan quarterly report for the first quarter ending June 30, 2022, with the Public Utilities Commission (“Commission”) on August 15, 2022. The Company did not commit to recloser purchases until after filing this report with the Commission. The Company discussed the recloser installations during the September 23, 2022 meeting with the Division to review the report.

The Narragansett Electric Company  
d/b/a Rhode Island Energy

In Re: Proposed FY 2024 Electric Infrastructure, Safety and Reliability Plan  
21-Month Filing: Period April 2023 – December 2024  
Responses to the Division's Second Set of Data Requests  
Issued on November 17, 2022

---

Division 2-12

Request:

What are the projects in the long-term forecast that are in process of having total project cost estimates revised? (page 28) What is the status and when will the revised long-term forecast be provided to the Division?

Response:

As stated on page 28 of the Fiscal Year 2024 Electric ISR Plan, the Company continuously reviews and updates the capital plan throughout the year and updates estimates as needed. Currently, the only project within the long-term forecast with respect to which the Company is revisiting costs is New Lafayette. This project is delayed because of transmission outage coordination issues, and construction will now begin in Calendar Year 2025. The Company is confident in the ability to spend the budget provided in the FY 2024 Electric ISR Plan but is in the process of revisiting future year spend, taking into consideration inflation and increased material costs. The Company will have the revised estimate complete in the spring of 2023 and will provide the Division of Public Utilities and Carriers an update.

The Narragansett Electric Company  
d/b/a Rhode Island Energy

In Re: Proposed FY 2024 Electric Infrastructure, Safety and Reliability Plan  
21-Month Filing: Period April 2023 – December 2024  
Responses to the Division’s Second Set of Data Requests  
Issued on November 17, 2022

---

Division 2-13

Request:

Explain how GMP investments will improve system reliability where interruptions are caused by trees, deteriorated equipment, and intentional (top three drivers of customer interruptions, page 71).

Response:

As demonstrated throughout the industry, Grid Modernization Plan (“GMP”) type investments provide substantial reliability benefits through improved sensing, automatic sectionalization and restoration. With increased sectionalization, it limits the impact of outages so fewer customers are affected. For example, in a 2014 Department of Energy study of five utilities with fault location, isolation, and service restoration (“FLISR”) capability in place, “FLISR reduced the number of customers interrupted (CI) by up to 45%, and reduced the customer minutes of interruption (CMI) by up to 51% for an outage event.”<sup>1</sup> Example GMP reliability benefits have been quantified in the Company’s responses to Division 1-23 and Division 1-33.

In addition to the significant improvements provided by FLISR systems, the GMP investments provide a foundation for more advanced reliability functions such as distance-to-fault and incipient fault detection, downed conductor detection, dynamic setting capability, forward/reverse fault detection, voltage detection, and ADMS telemetry interface. In addition to gaining system visibility and flexibility to operate a system with high distributed energy resource penetration, the incipient fault detection does show promise in identifying intermittent tree contact that can be addressed before an outage occurs.

Lastly, intentional outages will be substantially reduced. Presently, when a field operator finds a problem on the system, the operator will work through the control center and sometimes request de-energization of a portion of the system for safety and/or equipment damage perspectives. The GMP investments will enable operators to remotely control sectionalizing devices allowing for unaffected line sections to be transferred within five minutes (improving both safety and reliability).

---

<sup>1</sup> [https://www.smartgrid.gov/files/documents/B5\\_draft\\_report-12-18-2014.pdf](https://www.smartgrid.gov/files/documents/B5_draft_report-12-18-2014.pdf).

The Narragansett Electric Company  
d/b/a Rhode Island Energy

In Re: Proposed FY 2024 Electric Infrastructure, Safety and Reliability Plan  
21-Month Filing: Period April 2023 – December 2024  
Responses to the Division's Second Set of Data Requests  
Issued on November 17, 2022

---

Division 2-14

Request:

The Company's FY 2023 First Quarterly Update indicates that 960 meters (CENTRON - 2S 240V CL200) were purchased in the first three months ending June 30, 2022 (Attachment H). Upon the Division's request, the Company provided the meter specification sheet and indicated that the purchase cost for 960 meters is \$34,806.24.

- a. Confirm the purchase cost which amounts to approximately \$36/meter.
- b. How many meters with these same specifications are installed? How many meters are in inventory?
- c. The meter specification sheet indicates the meter provides both baseline and advanced data collection functionality and delivers the data with multiple technologies including handheld computer, a vehicle-based mobile automated meter reading (AMR) unit, or a network data solution. Discuss whether these meters are being installed and used with the Company's current AMR system, and also capable of being used in the future proposed AMF system. If the Company proceeds with the AMF program, will these meters be used, used but modified, or replaced? Please explain.

Response:

- a. The purchase cost of the Itron Centron R400 2S 240V CL200 meter amounts to \$36.25 per meter.
- b. There are currently 5,769 meters installed in the field and another 1,485 meters in inventory at the meter shop with these same specifications.
- c. These Itron Centron R400 2S 240V CL200 meters are being installed and used with the Company's current AMR system and are not capable of being used in the future proposed advanced metering functionality ("AMF") system. The Itron Centron R400 2S 240V CL200 meter is an AMR meter that lacks the same functionality as the proposed AMF meter. They cannot be modified and would need to be replaced with an AMF meter.

The Narragansett Electric Company  
d/b/a Rhode Island Energy

In Re: Proposed FY 2024 Electric Infrastructure, Safety and Reliability Plan  
21-Month Filing: Period April 2023 – December 2024  
Responses to the Division’s Second Set of Data Requests  
Issued on November 17, 2022

---

Division 2-15

Request:

The Company proposes ISR Plan spend to enable Distributed Energy Resource (“DER”) integration (page 5). How does the Company justify expenditures for system upgrades to enable DER integration where those upgrades would customarily be the responsibility of the interconnecting DER under current policies? Are future interconnecting DERs benefitting from GMP investments in a manner that previous interconnecting DERs would not? Explain.

Response:

The Company understands the question that is to be addressed relates to the proposed Grid Modernization Plan (“GMP”) capital investments because those are what the Company was referring to in the statement on page 5 that “[t]he plan includes spending needed to . . . enable Distributed Energy Resource (“DER”) integration and meeting State clean energy goals.” DER is defined as a resource sited close to customers that can provide electricity generation (e.g., solar DG, wind DG) or flexible demand (e.g., energy storage, electric vehicles, electric heat pumps).

Specifically, the DER Monitor/Manage capital investment which is a component of the overall GMP and included in the ISR enables Distributed Generation (“DG”) integration reducing the need to curtail. Additionally it supports future flexible demand, for example the dispatch of energy storage. The overall DER Monitor/Manage program will be described in detail in the Company’s forthcoming Grid Modernization Plan (“GMP”). Additionally, the Company is assessing the legal and regulatory approvals necessary to permit DER Monitor/Manage and will make a separate filing for such approvals, including any tariff changes.

DER Monitor/Manage will be used to take advantage of smart inverters by adjusting DG output to benefit the grid. As a result, DG developers and customers will be able to continue to operate DGs with reduced output compared to experiencing curtailment, which the Company will need to exercise to avoid system violations to maintain thermal and voltage compliance.<sup>1</sup> DER Monitor/Manage will benefit the entire system due to improved utilization, stabilization, and quality of power, which benefits all.

Furthermore, with each DG addition, there is an opportunity to gain visibility and fully integrate the DG into the distribution system at the time of interconnection or it becomes a lost opportunity where its operation can be detrimental to overall system safety and reliability if DER Monitor and Management is not required through the interconnection process. Because DER

---

<sup>1</sup> Seasonal curtailment means the Company would need to curtail renewable DG anytime the estimated maximum seasonal DG output of the installed capacity was predicted to exceed the system design limitations of the system.

The Narragansett Electric Company  
d/b/a Rhode Island Energy

In Re: Proposed FY 2024 Electric Infrastructure, Safety and Reliability Plan  
21-Month Filing: Period April 2023 – December 2024  
Responses to the Division’s Second Set of Data Requests  
Issued on November 17, 2022

---

Division 2-15, page 2

Monitor/Manage effects the safety and reliability of the entire system, the Company believes it is appropriate to include these expenditures in the ISR rather than placing the burden on the DG interconnection.

Finally, as DER penetration builds, it will be increasingly more difficult to attribute system changes to a particular DG interconnection. Also, since the investments enable both DG and EV/HPs it is difficult to assign the costs and responsibility to an individual customer. The DG interconnection tariff states that DG projects are only responsible for system modifications which are solely required for their project.<sup>2</sup>

Therefore, the Company is including these proposed expenditures through the ISR because they 1) benefit all customers and the entire system, 2) enable all DER technologies, rather than benefiting just the interconnecting DG customers, and 3) the expenditure can not be attributed to a particular DG interconnection therefore is not responsibility of the interconnecting DG under the current tariff. These investments will benefit both future interconnecting DERs and those DERs who have interconnected previously.<sup>3</sup>

---

<sup>2</sup> See Standards for Connecting Distributed Generation, R.I.P.U.C. No. 2258, Section 1.2 (Definitions – System Modification); Section 5.3 (System Modification Costs).

<sup>3</sup> Although DER Monitor/Manage will likely reduce the cost of system modifications for future interconnecting customers, the investments still are justified and appropriate because all customers will benefit from the functionality that comes from DER Monitor/Manage, including those DER interconnecting customers who interconnected previously, as described above.

The Narragansett Electric Company  
d/b/a Rhode Island Energy  
In Re: Proposed FY 2024 Electric Infrastructure, Safety and Reliability Plan  
21-Month Filing: Period April 2023 – December 2024  
Responses to the Division’s Second Set of Data Requests  
Issued on November 17, 2022

---

Division 2-16

Request:

Provide the underlying analysis that the Company relies upon to determine the benefits of additional capital investments as compared to DER curtailment. Include assumptions on frequency, duration, and compensation for DER curtailment.

Response:

Attachment DIV 2-16 shows two photovoltaic (“PV”) generation 8760 hour files, uncurtailed and curtailed, showing frequency and duration. The curtailed data was limited to no more than 3% of total yearly generation. The Grid Modernization Plan (“GMP”) avoided infrastructure benefits were not based solely on distributed generation (“DG”) curtailment. The GMP enables a number of functionalities that, if used with DG curtailment, can provide significant avoided infrastructure benefits.

Compensation for curtailment was not considered by the Company. The Company conducted a technical analysis to determine how best to plan the electric system. However, in partnership with state agencies, this analysis could be used to develop a DER curtailment methodology that may include compensation. The Company suggests a review of Independent System Operator (“ISO”) data and curtailment methods across the United States prior to compensation discussions.

		97.0%	3.0%	
KWH		-7,996,638,226	-7,756,571,315	-240,066,911
<b>Max</b>		0	0	0
<b>Average</b>		-912,962	-885,554	-27,408
<b>Min</b>		-4,988,000	-4,623,104	-1,737,797

Month	Day	Hour	PV POWER (KVA)	PV POWER AFTER CURTAIL (KVA)	CURTAILED PV POWER (KVA)
1	1	1	0	0	0
1	1	2	0	0	0
1	1	3	0	0	0
1	1	4	0	0	0
1	1	5	0	0	0
1	1	6	0	0	0
1	1	7	-123051	-123051	0
1	1	8	-927826	-927826	0
1	1	9	-2627539	-2627539	0
1	1	10	-3262376	-3262376	0
1	1	11	-2793992	-2793992	0
1	1	12	-2601972	-2601972	0
1	1	13	-2344328	-2344328	0
1	1	14	-2181043	-2181043	0
1	1	15	-1039242	-1039242	0
1	1	16	0	0	0
1	1	17	0	0	0
1	1	18	0	0	0
1	1	19	0	0	0
1	1	20	0	0	0
1	1	21	0	0	0
1	1	22	0	0	0
1	1	23	0	0	0
1	2	0	0	0	0
1	2	1	0	0	0
1	2	2	0	0	0
1	2	3	0	0	0
1	2	4	0	0	0
1	2	5	0	0	0
1	2	6	0	0	0
1	2	7	-61191	-61191	0
1	2	8	-492647	-492647	0
1	2	9	-272824	-272824	0

1	2	10	-635299	-635299	0
1	2	11	-1230239	-1230239	0
1	2	12	-960998	-960998	0
1	2	13	-719684	-719684	0
1	2	14	-361645	-361645	0
1	2	15	-157822	-157822	0
1	2	16	0	0	0
1	2	17	0	0	0
1	2	18	0	0	0
1	2	19	0	0	0
1	2	20	0	0	0
1	2	21	0	0	0
1	2	22	0	0	0
1	2	23	0	0	0
1	3	0	0	0	0
1	3	1	0	0	0
1	3	2	0	0	0
1	3	3	0	0	0
1	3	4	0	0	0
1	3	5	0	0	0
1	3	6	0	0	0
1	3	7	-5721	-5721	0
1	3	8	-1531805	-1531805	0
1	3	9	-2659581	-2659581	0
1	3	10	-3443005	-3443005	0
1	3	11	-3801628	-3801628	0
1	3	12	-3740230	-3740230	0
1	3	13	-3335050	-3335050	0
1	3	14	-2493710	-2493710	0
1	3	15	-1327135	-1327135	0
1	3	16	0	0	0
1	3	17	0	0	0
1	3	18	0	0	0
1	3	19	0	0	0
1	3	20	0	0	0
1	3	21	0	0	0
1	3	22	0	0	0
1	3	23	0	0	0
1	4	0	0	0	0
1	4	1	0	0	0
1	4	2	0	0	0
1	4	3	0	0	0
1	4	4	0	0	0
1	4	5	0	0	0

1	4	6	0	0	0
1	4	7	-134816	-134816	0
1	4	8	-1716559	-1716559	0
1	4	9	-2754131	-2754131	0
1	4	10	-3414366	-3414366	0
1	4	11	-3689947	-3689947	0
1	4	12	-3597948	-3597948	0
1	4	13	-3151969	-3151969	0
1	4	14	-2352975	-2352975	0
1	4	15	-1240978	-1240978	0
1	4	16	0	0	0
1	4	17	0	0	0
1	4	18	0	0	0
1	4	19	0	0	0
1	4	20	0	0	0
1	4	21	0	0	0
1	4	22	0	0	0
1	4	23	0	0	0
1	5	0	0	0	0
1	5	1	0	0	0
1	5	2	0	0	0
1	5	3	0	0	0
1	5	4	0	0	0
1	5	5	0	0	0
1	5	6	0	0	0
1	5	7	-400023	-400023	0
1	5	8	-1627076	-1627076	0
1	5	9	-1288952	-1288952	0
1	5	10	-437482	-437482	0
1	5	11	-763174	-763174	0
1	5	12	-679340	-679340	0
1	5	13	-850497	-850497	0
1	5	14	-1076661	-1076661	0
1	5	15	-348610	-348610	0
1	5	16	0	0	0
1	5	17	0	0	0
1	5	18	0	0	0
1	5	19	0	0	0
1	5	20	0	0	0
1	5	21	0	0	0
1	5	22	0	0	0
1	5	23	0	0	0
1	6	0	0	0	0
1	6	1	0	0	0

1	6	2	0	0	0
1	6	3	0	0	0
1	6	4	0	0	0
1	6	5	0	0	0
1	6	6	0	0	0
1	6	7	-36830	-36830	0
1	6	8	-130658	-130658	0
1	6	9	-150647	-150647	0
1	6	10	-274342	-274342	0
1	6	11	-362343	-362343	0
1	6	12	-1361773	-1361773	0
1	6	13	-160275	-160275	0
1	6	14	-116852	-116852	0
1	6	15	-16040	-16040	0
1	6	16	0	0	0
1	6	17	0	0	0
1	6	18	0	0	0
1	6	19	0	0	0
1	6	20	0	0	0
1	6	21	0	0	0
1	6	22	0	0	0
1	6	23	0	0	0
1	7	0	0	0	0
1	7	1	0	0	0
1	7	2	0	0	0
1	7	3	0	0	0
1	7	4	0	0	0
1	7	5	0	0	0
1	7	6	0	0	0
1	7	7	-334079	-334079	0
1	7	8	-1687869	-1687869	0
1	7	9	-2841094	-2841094	0
1	7	10	-3613457	-3613457	0
1	7	11	-3936815	-3936815	0
1	7	12	-3893676	-3893676	0
1	7	13	-3464543	-3464543	0
1	7	14	-2659990	-2659990	0
1	7	15	-1429289	-1429289	0
1	7	16	0	0	0
1	7	17	0	0	0
1	7	18	0	0	0
1	7	19	0	0	0
1	7	20	0	0	0
1	7	21	0	0	0

1	7	22	0	0	0
1	7	23	0	0	0
1	8	0	0	0	0
1	8	1	0	0	0
1	8	2	0	0	0
1	8	3	0	0	0
1	8	4	0	0	0
1	8	5	0	0	0
1	8	6	0	0	0
1	8	7	-471954	-471954	0
1	8	8	-898954	-898954	0
1	8	9	-2077624	-2077624	0
1	8	10	-2625787	-2625787	0
1	8	11	-3755210	-3755210	0
1	8	12	-3644067	-3644067	0
1	8	13	-3239883	-3239883	0
1	8	14	-2448430	-2448430	0
1	8	15	-1331046	-1331046	0
1	8	16	0	0	0
1	8	17	0	0	0
1	8	18	0	0	0
1	8	19	0	0	0
1	8	20	0	0	0
1	8	21	0	0	0
1	8	22	0	0	0
1	8	23	0	0	0
1	9	0	0	0	0
1	9	1	0	0	0
1	9	2	0	0	0
1	9	3	0	0	0
1	9	4	0	0	0
1	9	5	0	0	0
1	9	6	0	0	0
1	9	7	-356326	-356326	0
1	9	8	-1640021	-1640021	0
1	9	9	-2687227	-2687227	0
1	9	10	-3391382	-3391382	0
1	9	11	-3690714	-3690714	0
1	9	12	-3626003	-3626003	0
1	9	13	-3223391	-3223391	0
1	9	14	-2464628	-2464628	0
1	9	15	-1361293	-1361293	0
1	9	16	0	0	0
1	9	17	0	0	0

1	9	18	0	0	0
1	9	19	0	0	0
1	9	20	0	0	0
1	9	21	0	0	0
1	9	22	0	0	0
1	9	23	0	0	0
1	10	0	0	0	0
1	10	1	0	0	0
1	10	2	0	0	0
1	10	3	0	0	0
1	10	4	0	0	0
1	10	5	0	0	0
1	10	6	0	0	0
1	10	7	-16541	-16541	0
1	10	8	-137112	-137112	0
1	10	9	-451847	-451847	0
1	10	10	-521778	-521778	0
1	10	11	-1645410	-1645410	0
1	10	12	-728835	-728835	0
1	10	13	-106908	-106908	0
1	10	14	-290934	-290934	0
1	10	15	-1125454	-1125454	0
1	10	16	0	0	0
1	10	17	0	0	0
1	10	18	0	0	0
1	10	19	0	0	0
1	10	20	0	0	0
1	10	21	0	0	0
1	10	22	0	0	0
1	10	23	0	0	0
1	11	0	0	0	0
1	11	1	0	0	0
1	11	2	0	0	0
1	11	3	0	0	0
1	11	4	0	0	0
1	11	5	0	0	0
1	11	6	0	0	0
1	11	7	-37152	-37152	0
1	11	8	-463053	-463053	0
1	11	9	-467866	-467866	0
1	11	10	-551140	-551140	0
1	11	11	-390453	-390453	0
1	11	12	-536591	-536591	0
1	11	13	-416756	-416756	0

1	11	14	-329731	-329731	0
1	11	15	-133715	-133715	0
1	11	16	0	0	0
1	11	17	0	0	0
1	11	18	0	0	0
1	11	19	0	0	0
1	11	20	0	0	0
1	11	21	0	0	0
1	11	22	0	0	0
1	11	23	0	0	0
1	12	0	0	0	0
1	12	1	0	0	0
1	12	2	0	0	0
1	12	3	0	0	0
1	12	4	0	0	0
1	12	5	0	0	0
1	12	6	0	0	0
1	12	7	-124008	-124008	0
1	12	8	-1533844	-1533844	0
1	12	9	-1216220	-1216220	0
1	12	10	-1576220	-1576220	0
1	12	11	-3446500	-3446500	0
1	12	12	-2586944	-2586944	0
1	12	13	-1919176	-1919176	0
1	12	14	-796097	-796097	0
1	12	15	-1297030	-1297030	0
1	12	16	0	0	0
1	12	17	0	0	0
1	12	18	0	0	0
1	12	19	0	0	0
1	12	20	0	0	0
1	12	21	0	0	0
1	12	22	0	0	0
1	12	23	0	0	0
1	13	0	0	0	0
1	13	1	0	0	0
1	13	2	0	0	0
1	13	3	0	0	0
1	13	4	0	0	0
1	13	5	0	0	0
1	13	6	0	0	0
1	13	7	-385933	-385933	0
1	13	8	-1558808	-1558808	0
1	13	9	-1910469	-1910469	0

1	13	10	-2358097	-2358097	0
1	13	11	-2630236	-2630236	0
1	13	12	-3427752	-3427752	0
1	13	13	-2333476	-2333476	0
1	13	14	-1998719	-1998719	0
1	13	15	-844364	-844364	0
1	13	16	0	0	0
1	13	17	0	0	0
1	13	18	0	0	0
1	13	19	0	0	0
1	13	20	0	0	0
1	13	21	0	0	0
1	13	22	0	0	0
1	13	23	0	0	0
1	14	0	0	0	0
1	14	1	0	0	0
1	14	2	0	0	0
1	14	3	0	0	0
1	14	4	0	0	0
1	14	5	0	0	0
1	14	6	0	0	0
1	14	7	-31695	-31695	0
1	14	8	-243750	-243750	0
1	14	9	-357104	-357104	0
1	14	10	-548085	-548085	0
1	14	11	-336710	-336710	0
1	14	12	-292891	-292891	0
1	14	13	-313840	-313840	0
1	14	14	-178479	-178479	0
1	14	15	-42361	-42361	0
1	14	16	0	0	0
1	14	17	0	0	0
1	14	18	0	0	0
1	14	19	0	0	0
1	14	20	0	0	0
1	14	21	0	0	0
1	14	22	0	0	0
1	14	23	0	0	0
1	15	0	0	0	0
1	15	1	0	0	0
1	15	2	0	0	0
1	15	3	0	0	0
1	15	4	0	0	0
1	15	5	0	0	0

1	15	6	0	0	0
1	15	7	-407174	-407174	0
1	15	8	-1622255	-1622255	0
1	15	9	-2639131	-2639131	0
1	15	10	-3281393	-3281393	0
1	15	11	-2757470	-2757470	0
1	15	12	-2307227	-2307227	0
1	15	13	-2198516	-2198516	0
1	15	14	-1758181	-1758181	0
1	15	15	-1007623	-1007623	0
1	15	16	0	0	0
1	15	17	0	0	0
1	15	18	0	0	0
1	15	19	0	0	0
1	15	20	0	0	0
1	15	21	0	0	0
1	15	22	0	0	0
1	15	23	0	0	0
1	16	0	0	0	0
1	16	1	0	0	0
1	16	2	0	0	0
1	16	3	0	0	0
1	16	4	0	0	0
1	16	5	0	0	0
1	16	6	0	0	0
1	16	7	-70515	-70515	0
1	16	8	-802775	-802775	0
1	16	9	-384091	-384091	0
1	16	10	-790228	-790228	0
1	16	11	-677214	-677214	0
1	16	12	-1005126	-1005126	0
1	16	13	-1025422	-1025422	0
1	16	14	-758563	-758563	0
1	16	15	-122761	-122761	0
1	16	16	0	0	0
1	16	17	0	0	0
1	16	18	0	0	0
1	16	19	0	0	0
1	16	20	0	0	0
1	16	21	0	0	0
1	16	22	0	0	0
1	16	23	0	0	0
1	17	0	0	0	0
1	17	1	0	0	0

1	17	2	0	0	0
1	17	3	0	0	0
1	17	4	0	0	0
1	17	5	0	0	0
1	17	6	0	0	0
1	17	7	-348456	-348456	0
1	17	8	-1580179	-1580179	0
1	17	9	-2613800	-2613800	0
1	17	10	-3269326	-3269326	0
1	17	11	-3536908	-3536908	0
1	17	12	-3467431	-3467431	0
1	17	13	-3089332	-3089332	0
1	17	14	-2396052	-2396052	0
1	17	15	-1399543	-1399543	0
1	17	16	-226644	-226644	0
1	17	17	0	0	0
1	17	18	0	0	0
1	17	19	0	0	0
1	17	20	0	0	0
1	17	21	0	0	0
1	17	22	0	0	0
1	17	23	0	0	0
1	18	0	0	0	0
1	18	1	0	0	0
1	18	2	0	0	0
1	18	3	0	0	0
1	18	4	0	0	0
1	18	5	0	0	0
1	18	6	0	0	0
1	18	7	-5404	-5404	0
1	18	8	-135363	-135363	0
1	18	9	-129260	-129260	0
1	18	10	-172223	-172223	0
1	18	11	-97053	-97053	0
1	18	12	-37833	-37833	0
1	18	13	-1073693	-1073693	0
1	18	14	-501695	-501695	0
1	18	15	-1023465	-1023465	0
1	18	16	-69377	-69377	0
1	18	17	0	0	0
1	18	18	0	0	0
1	18	19	0	0	0
1	18	20	0	0	0
1	18	21	0	0	0

1	18	22	0	0	0
1	18	23	0	0	0
1	19	0	0	0	0
1	19	1	0	0	0
1	19	2	0	0	0
1	19	3	0	0	0
1	19	4	0	0	0
1	19	5	0	0	0
1	19	6	0	0	0
1	19	7	-32917	-32917	0
1	19	8	-120152	-120152	0
1	19	9	-2543877	-2543877	0
1	19	10	-3287447	-3287447	0
1	19	11	-2184120	-2184120	0
1	19	12	-3661852	-3661852	0
1	19	13	-3230003	-3230003	0
1	19	14	-2432907	-2432907	0
1	19	15	-1351338	-1351338	0
1	19	16	-212201	-212201	0
1	19	17	0	0	0
1	19	18	0	0	0
1	19	19	0	0	0
1	19	20	0	0	0
1	19	21	0	0	0
1	19	22	0	0	0
1	19	23	0	0	0
1	20	0	0	0	0
1	20	1	0	0	0
1	20	2	0	0	0
1	20	3	0	0	0
1	20	4	0	0	0
1	20	5	0	0	0
1	20	6	0	0	0
1	20	7	-54320	-54320	0
1	20	8	-1355703	-1355703	0
1	20	9	-345594	-345594	0
1	20	10	-1486099	-1486099	0
1	20	11	-1973419	-1973419	0
1	20	12	-1551390	-1551390	0
1	20	13	-1881213	-1881213	0
1	20	14	-703028	-703028	0
1	20	15	-412901	-412901	0
1	20	16	-37781	-37781	0
1	20	17	0	0	0

1	20	18	0	0	0
1	20	19	0	0	0
1	20	20	0	0	0
1	20	21	0	0	0
1	20	22	0	0	0
1	20	23	0	0	0
1	21	0	0	0	0
1	21	1	0	0	0
1	21	2	0	0	0
1	21	3	0	0	0
1	21	4	0	0	0
1	21	5	0	0	0
1	21	6	0	0	0
1	21	7	-61639	-61639	0
1	21	8	-631923	-631923	0
1	21	9	-1639461	-1639461	0
1	21	10	-1832846	-1832846	0
1	21	11	-2126639	-2126639	0
1	21	12	-1353410	-1353410	0
1	21	13	-1761986	-1761986	0
1	21	14	-647621	-647621	0
1	21	15	-1088677	-1088677	0
1	21	16	-77456	-77456	0
1	21	17	0	0	0
1	21	18	0	0	0
1	21	19	0	0	0
1	21	20	0	0	0
1	21	21	0	0	0
1	21	22	0	0	0
1	21	23	0	0	0
1	22	0	0	0	0
1	22	1	0	0	0
1	22	2	0	0	0
1	22	3	0	0	0
1	22	4	0	0	0
1	22	5	0	0	0
1	22	6	0	0	0
1	22	7	-11305	-11305	0
1	22	8	-273133	-273133	0
1	22	9	-1169347	-1169347	0
1	22	10	-2284185	-2284185	0
1	22	11	-3167032	-3167032	0
1	22	12	-3398723	-3398723	0
1	22	13	-2821819	-2821819	0

1	22	14	-2242628	-2242628	0
1	22	15	-1790695	-1790695	0
1	22	16	-471043	-471043	0
1	22	17	0	0	0
1	22	18	0	0	0
1	22	19	0	0	0
1	22	20	0	0	0
1	22	21	0	0	0
1	22	22	0	0	0
1	22	23	0	0	0
1	23	0	0	0	0
1	23	1	0	0	0
1	23	2	0	0	0
1	23	3	0	0	0
1	23	4	0	0	0
1	23	5	0	0	0
1	23	6	0	0	0
1	23	7	-542397	-542397	0
1	23	8	-1485274	-1485274	0
1	23	9	-2037310	-2037310	0
1	23	10	-3787897	-3787897	0
1	23	11	-4080312	-4080312	0
1	23	12	-4029096	-4029096	0
1	23	13	-3628813	-3628813	0
1	23	14	-2842845	-2842845	0
1	23	15	-1718309	-1718309	0
1	23	16	-433670	-433670	0
1	23	17	0	0	0
1	23	18	0	0	0
1	23	19	0	0	0
1	23	20	0	0	0
1	23	21	0	0	0
1	23	22	0	0	0
1	23	23	0	0	0
1	24	0	0	0	0
1	24	1	0	0	0
1	24	2	0	0	0
1	24	3	0	0	0
1	24	4	0	0	0
1	24	5	0	0	0
1	24	6	0	0	0
1	24	7	-587050	-587050	0
1	24	8	-1972788	-1972788	0
1	24	9	-3153236	-3153236	0

1	24	10	-3932133	-3932133	0
1	24	11	-4163247	-4163247	0
1	24	12	-4131314	-4131314	0
1	24	13	-3738742	-3738742	0
1	24	14	-2962970	-2962970	0
1	24	15	-1819614	-1819614	0
1	24	16	-506226	-506226	0
1	24	17	0	0	0
1	24	18	0	0	0
1	24	19	0	0	0
1	24	20	0	0	0
1	24	21	0	0	0
1	24	22	0	0	0
1	24	23	0	0	0
1	25	0	0	0	0
1	25	1	0	0	0
1	25	2	0	0	0
1	25	3	0	0	0
1	25	4	0	0	0
1	25	5	0	0	0
1	25	6	0	0	0
1	25	7	-87650	-87650	0
1	25	8	-1063201	-1063201	0
1	25	9	-1485763	-1485763	0
1	25	10	-1861645	-1861645	0
1	25	11	-1979842	-1979842	0
1	25	12	-2628638	-2628638	0
1	25	13	-2263078	-2263078	0
1	25	14	-1352812	-1352812	0
1	25	15	-294007	-294007	0
1	25	16	-43202	-43202	0
1	25	17	0	0	0
1	25	18	0	0	0
1	25	19	0	0	0
1	25	20	0	0	0
1	25	21	0	0	0
1	25	22	0	0	0
1	25	23	0	0	0
1	26	0	0	0	0
1	26	1	0	0	0
1	26	2	0	0	0
1	26	3	0	0	0
1	26	4	0	0	0
1	26	5	0	0	0

1	26	6	0	0	0
1	26	7	-580636	-580636	0
1	26	8	-1943389	-1943389	0
1	26	9	-3105893	-3105893	0
1	26	10	-3835186	-3835186	0
1	26	11	-4182420	-4182420	0
1	26	12	-4127988	-4127988	0
1	26	13	-2108970	-2108970	0
1	26	14	-1203674	-1203674	0
1	26	15	-275821	-275821	0
1	26	16	-50310	-50310	0
1	26	17	0	0	0
1	26	18	0	0	0
1	26	19	0	0	0
1	26	20	0	0	0
1	26	21	0	0	0
1	26	22	0	0	0
1	26	23	0	0	0
1	27	0	0	0	0
1	27	1	0	0	0
1	27	2	0	0	0
1	27	3	0	0	0
1	27	4	0	0	0
1	27	5	0	0	0
1	27	6	0	0	0
1	27	7	-332313	-332313	0
1	27	8	-1512438	-1512438	0
1	27	9	-1276256	-1276256	0
1	27	10	-1923720	-1923720	0
1	27	11	-1870685	-1870685	0
1	27	12	-1828460	-1828460	0
1	27	13	-2999516	-2999516	0
1	27	14	-2333134	-2333134	0
1	27	15	-792894	-792894	0
1	27	16	-131385	-131385	0
1	27	17	0	0	0
1	27	18	0	0	0
1	27	19	0	0	0
1	27	20	0	0	0
1	27	21	0	0	0
1	27	22	0	0	0
1	27	23	0	0	0
1	28	0	0	0	0
1	28	1	0	0	0

1	28	2	0	0	0
1	28	3	0	0	0
1	28	4	0	0	0
1	28	5	0	0	0
1	28	6	0	0	0
1	28	7	-634892	-634892	0
1	28	8	-2020941	-2020941	0
1	28	9	-3187362	-3187362	0
1	28	10	-3214962	-3214962	0
1	28	11	-4198864	-4198864	0
1	28	12	-4151911	-4151911	0
1	28	13	-3166864	-3166864	0
1	28	14	-2416553	-2416553	0
1	28	15	-997486	-997486	0
1	28	16	-201345	-201345	0
1	28	17	0	0	0
1	28	18	0	0	0
1	28	19	0	0	0
1	28	20	0	0	0
1	28	21	0	0	0
1	28	22	0	0	0
1	28	23	0	0	0
1	29	0	0	0	0
1	29	1	0	0	0
1	29	2	0	0	0
1	29	3	0	0	0
1	29	4	0	0	0
1	29	5	0	0	0
1	29	6	0	0	0
1	29	7	-50748	-50748	0
1	29	8	-810887	-810887	0
1	29	9	-1764446	-1764446	0
1	29	10	-2672356	-2672356	0
1	29	11	-4168012	-4168012	0
1	29	12	-4136890	-4136890	0
1	29	13	-3769009	-3769009	0
1	29	14	-3021877	-3021877	0
1	29	15	-1917351	-1917351	0
1	29	16	-608124	-608124	0
1	29	17	0	0	0
1	29	18	0	0	0
1	29	19	0	0	0
1	29	20	0	0	0
1	29	21	0	0	0

1	29	22	0	0	0
1	29	23	0	0	0
1	30	0	0	0	0
1	30	1	0	0	0
1	30	2	0	0	0
1	30	3	0	0	0
1	30	4	0	0	0
1	30	5	0	0	0
1	30	6	0	0	0
1	30	7	-664860	-664860	0
1	30	8	-2034435	-2034435	0
1	30	9	-3128446	-3128446	0
1	30	10	-3825163	-3825163	0
1	30	11	-4147587	-4147587	0
1	30	12	-4134721	-4134721	0
1	30	13	-3760781	-3760781	0
1	30	14	-3019927	-3019927	0
1	30	15	-1925084	-1925084	0
1	30	16	-626260	-626260	0
1	30	17	0	0	0
1	30	18	0	0	0
1	30	19	0	0	0
1	30	20	0	0	0
1	30	21	0	0	0
1	30	22	0	0	0
1	30	23	0	0	0
1	31	0	0	0	0
1	31	1	0	0	0
1	31	2	0	0	0
1	31	3	0	0	0
1	31	4	0	0	0
1	31	5	0	0	0
1	31	6	0	0	0
1	31	7	-114205	-114205	0
1	31	8	-606609	-606609	0
1	31	9	-1876844	-1876844	0
1	31	10	-3048013	-3048013	0
1	31	11	-3352467	-3352467	0
1	31	12	-3425809	-3425809	0
1	31	13	-3423854	-3423854	0
1	31	14	-1056372	-1056372	0
1	31	15	-133030	-133030	0
1	31	16	-27181	-27181	0
1	31	17	0	0	0

1	31	18	0	0	0
1	31	19	0	0	0
1	31	20	0	0	0
1	31	21	0	0	0
1	31	22	0	0	0
1	31	23	0	0	0
2	1	0	0	0	0
2	1	1	0	0	0
2	1	2	0	0	0
2	1	3	0	0	0
2	1	4	0	0	0
2	1	5	0	0	0
2	1	6	0	0	0
2	1	7	-653663	-653663	0
2	1	8	-2000542	-2000542	0
2	1	9	-3074526	-3074526	0
2	1	10	-3773199	-3773199	0
2	1	11	-4072784	-4072784	0
2	1	12	-4033689	-4033689	0
2	1	13	-3668614	-3668614	0
2	1	14	-2963170	-2963170	0
2	1	15	-1907983	-1907983	0
2	1	16	-612249	-612249	0
2	1	17	0	0	0
2	1	18	0	0	0
2	1	19	0	0	0
2	1	20	0	0	0
2	1	21	0	0	0
2	1	22	0	0	0
2	1	23	0	0	0
2	2	0	0	0	0
2	2	1	0	0	0
2	2	2	0	0	0
2	2	3	0	0	0
2	2	4	0	0	0
2	2	5	0	0	0
2	2	6	0	0	0
2	2	7	-70105	-70105	0
2	2	8	-350815	-350815	0
2	2	9	-1034391	-1034391	0
2	2	10	-1161542	-1161542	0
2	2	11	-873808	-873808	0
2	2	12	-697651	-697651	0
2	2	13	-586340	-586340	0

2	2	14	-548784	-548784	0
2	2	15	-881985	-881985	0
2	2	16	-182632	-182632	0
2	2	17	0	0	0
2	2	18	0	0	0
2	2	19	0	0	0
2	2	20	0	0	0
2	2	21	0	0	0
2	2	22	0	0	0
2	2	23	0	0	0
2	3	0	0	0	0
2	3	1	0	0	0
2	3	2	0	0	0
2	3	3	0	0	0
2	3	4	0	0	0
2	3	5	0	0	0
2	3	6	0	0	0
2	3	7	-507056	-507056	0
2	3	8	-1682404	-1682404	0
2	3	9	-2704565	-2704565	0
2	3	10	-3392740	-3392740	0
2	3	11	-3742249	-3742249	0
2	3	12	-3771798	-3771798	0
2	3	13	-3475572	-3475572	0
2	3	14	-2822861	-2822861	0
2	3	15	-1826415	-1826415	0
2	3	16	-610252	-610252	0
2	3	17	0	0	0
2	3	18	0	0	0
2	3	19	0	0	0
2	3	20	0	0	0
2	3	21	0	0	0
2	3	22	0	0	0
2	3	23	0	0	0
2	4	0	0	0	0
2	4	1	0	0	0
2	4	2	0	0	0
2	4	3	0	0	0
2	4	4	0	0	0
2	4	5	0	0	0
2	4	6	0	0	0
2	4	7	-493754	-493754	0
2	4	8	-1492903	-1492903	0
2	4	9	-1815119	-1815119	0

2	4	10	-1468019	-1468019	0
2	4	11	-1510177	-1510177	0
2	4	12	-626571	-626571	0
2	4	13	-1036819	-1036819	0
2	4	14	-920645	-920645	0
2	4	15	-718893	-718893	0
2	4	16	-141028	-141028	0
2	4	17	0	0	0
2	4	18	0	0	0
2	4	19	0	0	0
2	4	20	0	0	0
2	4	21	0	0	0
2	4	22	0	0	0
2	4	23	0	0	0
2	5	0	0	0	0
2	5	1	0	0	0
2	5	2	0	0	0
2	5	3	0	0	0
2	5	4	0	0	0
2	5	5	0	0	0
2	5	6	0	0	0
2	5	7	-546778	-546778	0
2	5	8	-1794921	-1794921	0
2	5	9	-2877503	-2877503	0
2	5	10	-3607132	-3607132	0
2	5	11	-3997643	-3997643	0
2	5	12	-4020946	-4020946	0
2	5	13	-3687858	-3687858	0
2	5	14	-3010450	-3010450	0
2	5	15	-1975128	-1975128	0
2	5	16	-678954	-678954	0
2	5	17	0	0	0
2	5	18	0	0	0
2	5	19	0	0	0
2	5	20	0	0	0
2	5	21	0	0	0
2	5	22	0	0	0
2	5	23	0	0	0
2	6	0	0	0	0
2	6	1	0	0	0
2	6	2	0	0	0
2	6	3	0	0	0
2	6	4	0	0	0
2	6	5	0	0	0

2	6	6	0	0	0
2	6	7	-54908	-54908	0
2	6	8	-250499	-250499	0
2	6	9	-794478	-794478	0
2	6	10	-1596339	-1596339	0
2	6	11	-603837	-603837	0
2	6	12	-745578	-745578	0
2	6	13	-428561	-428561	0
2	6	14	-2688440	-2688440	0
2	6	15	-886434	-886434	0
2	6	16	-181435	-181435	0
2	6	17	0	0	0
2	6	18	0	0	0
2	6	19	0	0	0
2	6	20	0	0	0
2	6	21	0	0	0
2	6	22	0	0	0
2	6	23	0	0	0
2	7	0	0	0	0
2	7	1	0	0	0
2	7	2	0	0	0
2	7	3	0	0	0
2	7	4	0	0	0
2	7	5	0	0	0
2	7	6	0	0	0
2	7	7	-633042	-633042	0
2	7	8	-1442859	-1442859	0
2	7	9	-2951599	-2951599	0
2	7	10	-2813557	-2813557	0
2	7	11	-2794327	-2794327	0
2	7	12	-2442494	-2442494	0
2	7	13	-2092045	-2092045	0
2	7	14	-1547768	-1547768	0
2	7	15	-882155	-882155	0
2	7	16	-242930	-242930	0
2	7	17	0	0	0
2	7	18	0	0	0
2	7	19	0	0	0
2	7	20	0	0	0
2	7	21	0	0	0
2	7	22	0	0	0
2	7	23	0	0	0
2	8	0	0	0	0
2	8	1	0	0	0

2	8	2	0	0	0
2	8	3	0	0	0
2	8	4	0	0	0
2	8	5	0	0	0
2	8	6	0	0	0
2	8	7	-658283	-658283	0
2	8	8	-695914	-695914	0
2	8	9	-1707311	-1707311	0
2	8	10	-3769255	-3769255	0
2	8	11	-4069528	-4069528	0
2	8	12	-4068375	-4068375	0
2	8	13	-2661722	-2661722	0
2	8	14	-2223738	-2223738	0
2	8	15	-2048748	-2048748	0
2	8	16	-384971	-384971	0
2	8	17	0	0	0
2	8	18	0	0	0
2	8	19	0	0	0
2	8	20	0	0	0
2	8	21	0	0	0
2	8	22	0	0	0
2	8	23	0	0	0
2	9	0	0	0	0
2	9	1	0	0	0
2	9	2	0	0	0
2	9	3	0	0	0
2	9	4	0	0	0
2	9	5	0	0	0
2	9	6	0	0	0
2	9	7	-558570	-558570	0
2	9	8	-1474813	-1474813	0
2	9	9	-2335795	-2335795	0
2	9	10	-2532112	-2532112	0
2	9	11	-1784454	-1784454	0
2	9	12	-1801637	-1801637	0
2	9	13	-2201456	-2201456	0
2	9	14	-2257979	-2257979	0
2	9	15	-1591535	-1591535	0
2	9	16	-585947	-585947	0
2	9	17	0	0	0
2	9	18	0	0	0
2	9	19	0	0	0
2	9	20	0	0	0
2	9	21	0	0	0

2	9	22	0	0	0
2	9	23	0	0	0
2	10	0	0	0	0
2	10	1	0	0	0
2	10	2	0	0	0
2	10	3	0	0	0
2	10	4	0	0	0
2	10	5	0	0	0
2	10	6	0	0	0
2	10	7	-735094	-735094	0
2	10	8	-2012324	-2012324	0
2	10	9	-1900422	-1900422	0
2	10	10	-3765829	-3765829	0
2	10	11	-4056734	-4056734	0
2	10	12	-4047803	-4047803	0
2	10	13	-3683910	-3683910	0
2	10	14	-2934474	-2934474	0
2	10	15	-1962001	-1962001	0
2	10	16	-743614	-743614	0
2	10	17	0	0	0
2	10	18	0	0	0
2	10	19	0	0	0
2	10	20	0	0	0
2	10	21	0	0	0
2	10	22	0	0	0
2	10	23	0	0	0
2	11	0	0	0	0
2	11	1	0	0	0
2	11	2	0	0	0
2	11	3	0	0	0
2	11	4	0	0	0
2	11	5	0	0	0
2	11	6	0	0	0
2	11	7	-528524	-528524	0
2	11	8	-1063201	-1063201	0
2	11	9	-3057437	-3057437	0
2	11	10	-3626003	-3626003	0
2	11	11	-3893006	-3893006	0
2	11	12	-3869605	-3869605	0
2	11	13	-3550082	-3550082	0
2	11	14	-2919961	-2919961	0
2	11	15	-1153207	-1153207	0
2	11	16	-572598	-572598	0
2	11	17	0	0	0

2	11	18	0	0	0
2	11	19	0	0	0
2	11	20	0	0	0
2	11	21	0	0	0
2	11	22	0	0	0
2	11	23	0	0	0
2	12	0	0	0	0
2	12	1	0	0	0
2	12	2	0	0	0
2	12	3	0	0	0
2	12	4	0	0	0
2	12	5	0	0	0
2	12	6	0	0	0
2	12	7	-537867	-537867	0
2	12	8	-731525	-731525	0
2	12	9	-499908	-499908	0
2	12	10	-518574	-518574	0
2	12	11	-681780	-681780	0
2	12	12	-782999	-782999	0
2	12	13	-748090	-748090	0
2	12	14	-1190546	-1190546	0
2	12	15	-297580	-297580	0
2	12	16	-617822	-617822	0
2	12	17	0	0	0
2	12	18	0	0	0
2	12	19	0	0	0
2	12	20	0	0	0
2	12	21	0	0	0
2	12	22	0	0	0
2	12	23	0	0	0
2	13	0	0	0	0
2	13	1	0	0	0
2	13	2	0	0	0
2	13	3	0	0	0
2	13	4	0	0	0
2	13	5	0	0	0
2	13	6	0	0	0
2	13	7	-363946	-363946	0
2	13	8	-992781	-992781	0
2	13	9	-1989844	-1989844	0
2	13	10	-1978907	-1978907	0
2	13	11	-2423023	-2423023	0
2	13	12	-3295184	-3295184	0
2	13	13	-2728119	-2728119	0

2	13	14	-2284933	-2284933	0
2	13	15	-1912434	-1912434	0
2	13	16	-391052	-391052	0
2	13	17	0	0	0
2	13	18	0	0	0
2	13	19	0	0	0
2	13	20	0	0	0
2	13	21	0	0	0
2	13	22	0	0	0
2	13	23	0	0	0
2	14	0	0	0	0
2	14	1	0	0	0
2	14	2	0	0	0
2	14	3	0	0	0
2	14	4	0	0	0
2	14	5	0	0	0
2	14	6	0	0	0
2	14	7	-640962	-640962	0
2	14	8	-1850322	-1850322	0
2	14	9	-1641441	-1641441	0
2	14	10	-2540127	-2540127	0
2	14	11	-3994942	-3994942	0
2	14	12	-4006904	-4006904	0
2	14	13	-3670287	-3670287	0
2	14	14	-2997634	-2997634	0
2	14	15	-1989894	-1989894	0
2	14	16	-754306	-754306	0
2	14	17	0	0	0
2	14	18	0	0	0
2	14	19	0	0	0
2	14	20	0	0	0
2	14	21	0	0	0
2	14	22	0	0	0
2	14	23	0	0	0
2	15	0	0	0	0
2	15	1	0	0	0
2	15	2	0	0	0
2	15	3	0	0	0
2	15	4	0	0	0
2	15	5	0	0	0
2	15	6	0	0	0
2	15	7	-900921	-900921	0
2	15	8	-2192318	-2192318	0
2	15	9	-3211196	-3211196	0

2	15	10	-3837192	-3837192	0
2	15	11	-4166626	-4166626	0
2	15	12	-4139482	-4139482	0
2	15	13	-3787867	-3787867	0
2	15	14	-3111318	-3111318	0
2	15	15	-2119506	-2119506	0
2	15	16	-846702	-846702	0
2	15	17	0	0	0
2	15	18	0	0	0
2	15	19	0	0	0
2	15	20	0	0	0
2	15	21	0	0	0
2	15	22	0	0	0
2	15	23	0	0	0
2	16	0	0	0	0
2	16	1	0	0	0
2	16	2	0	0	0
2	16	3	0	0	0
2	16	4	0	0	0
2	16	5	0	0	0
2	16	6	0	0	0
2	16	7	-829825	-829825	0
2	16	8	-2091913	-2091913	0
2	16	9	-3050708	-3050708	0
2	16	10	-3682089	-3682089	0
2	16	11	-3972052	-3972052	0
2	16	12	-3942161	-3942161	0
2	16	13	-3604891	-3604891	0
2	16	14	-2949432	-2949432	0
2	16	15	-1989282	-1989282	0
2	16	16	-775537	-775537	0
2	16	17	0	0	0
2	16	18	0	0	0
2	16	19	0	0	0
2	16	20	0	0	0
2	16	21	0	0	0
2	16	22	0	0	0
2	16	23	0	0	0
2	17	0	0	0	0
2	17	1	0	0	0
2	17	2	0	0	0
2	17	3	0	0	0
2	17	4	0	0	0
2	17	5	0	0	0

2	17	6	0	0	0
2	17	7	-92113	-92113	0
2	17	8	-962238	-962238	0
2	17	9	-1282497	-1282497	0
2	17	10	-2428525	-2428525	0
2	17	11	-2184589	-2184589	0
2	17	12	-2788426	-2788426	0
2	17	13	-2186992	-2186992	0
2	17	14	-1655981	-1655981	0
2	17	15	-1267937	-1267937	0
2	17	16	-95206	-95206	0
2	17	17	0	0	0
2	17	18	0	0	0
2	17	19	0	0	0
2	17	20	0	0	0
2	17	21	0	0	0
2	17	22	0	0	0
2	17	23	0	0	0
2	18	0	0	0	0
2	18	1	0	0	0
2	18	2	0	0	0
2	18	3	0	0	0
2	18	4	0	0	0
2	18	5	0	0	0
2	18	6	0	0	0
2	18	7	-16198	-16198	0
2	18	8	-91745	-91745	0
2	18	9	-289859	-289859	0
2	18	10	-426597	-426597	0
2	18	11	-672127	-672127	0
2	18	12	-811802	-811802	0
2	18	13	-572683	-572683	0
2	18	14	-383897	-383897	0
2	18	15	-166426	-166426	0
2	18	16	-108614	-108614	0
2	18	17	0	0	0
2	18	18	0	0	0
2	18	19	0	0	0
2	18	20	0	0	0
2	18	21	0	0	0
2	18	22	0	0	0
2	18	23	0	0	0
2	19	0	0	0	0
2	19	1	0	0	0

2	19	2	0	0	0
2	19	3	0	0	0
2	19	4	0	0	0
2	19	5	0	0	0
2	19	6	0	0	0
2	19	7	-830175	-830175	0
2	19	8	-1047778	-1047778	0
2	19	9	-2382758	-2382758	0
2	19	10	-3307256	-3307256	0
2	19	11	-3426921	-3426921	0
2	19	12	-4031425	-4031425	0
2	19	13	-2490951	-2490951	0
2	19	14	-2178169	-2178169	0
2	19	15	-1302883	-1302883	0
2	19	16	-263548	-263548	0
2	19	17	0	0	0
2	19	18	0	0	0
2	19	19	0	0	0
2	19	20	0	0	0
2	19	21	0	0	0
2	19	22	0	0	0
2	19	23	0	0	0
2	20	0	0	0	0
2	20	1	0	0	0
2	20	2	0	0	0
2	20	3	0	0	0
2	20	4	0	0	0
2	20	5	0	0	0
2	20	6	0	0	0
2	20	7	-172912	-172912	0
2	20	8	-933218	-933218	0
2	20	9	-1858851	-1858851	0
2	20	10	-1970591	-1970591	0
2	20	11	-1580317	-1580317	0
2	20	12	-1562505	-1562505	0
2	20	13	-2609028	-2609028	0
2	20	14	-2990829	-2990829	0
2	20	15	-1999965	-1999965	0
2	20	16	-811057	-811057	0
2	20	17	0	0	0
2	20	18	0	0	0
2	20	19	0	0	0
2	20	20	0	0	0
2	20	21	0	0	0

2	20	22	0	0	0
2	20	23	0	0	0
2	21	0	0	0	0
2	21	1	0	0	0
2	21	2	0	0	0
2	21	3	0	0	0
2	21	4	0	0	0
2	21	5	0	0	0
2	21	6	0	0	0
2	21	7	-206841	-206841	0
2	21	8	-2148166	-2148166	0
2	21	9	-2241738	-2241738	0
2	21	10	-2532132	-2532132	0
2	21	11	-1750790	-1750790	0
2	21	12	-1499024	-1499024	0
2	21	13	-1644055	-1644055	0
2	21	14	-2437124	-2437124	0
2	21	15	-330556	-330556	0
2	21	16	-253517	-253517	0
2	21	17	0	0	0
2	21	18	0	0	0
2	21	19	0	0	0
2	21	20	0	0	0
2	21	21	0	0	0
2	21	22	0	0	0
2	21	23	0	0	0
2	22	0	0	0	0
2	22	1	0	0	0
2	22	2	0	0	0
2	22	3	0	0	0
2	22	4	0	0	0
2	22	5	0	0	0
2	22	6	0	0	0
2	22	7	-387256	-387256	0
2	22	8	-2474508	-2474508	0
2	22	9	-3614927	-3614927	0
2	22	10	-4347413	-4347413	0
2	22	11	-4729909	-4020423	-709486
2	22	12	-4715881	-4244293	-471588
2	22	13	-4351530	-4351530	0
2	22	14	-3600005	-3600005	0
2	22	15	-2506442	-2506442	0
2	22	16	-1109298	-1109298	0
2	22	17	0	0	0

2	22	18	0	0	0
2	22	19	0	0	0
2	22	20	0	0	0
2	22	21	0	0	0
2	22	22	0	0	0
2	22	23	0	0	0
2	23	0	0	0	0
2	23	1	0	0	0
2	23	2	0	0	0
2	23	3	0	0	0
2	23	4	0	0	0
2	23	5	0	0	0
2	23	6	0	0	0
2	23	7	-1195001	-1195001	0
2	23	8	-2571263	-2571263	0
2	23	9	-3597322	-3597322	0
2	23	10	-4243877	-4243877	0
2	23	11	-4507368	-4507368	0
2	23	12	-4445600	-4445600	0
2	23	13	-4080267	-4080267	0
2	23	14	-3392728	-3392728	0
2	23	15	-1922376	-1922376	0
2	23	16	-751586	-751586	0
2	23	17	0	0	0
2	23	18	0	0	0
2	23	19	0	0	0
2	23	20	0	0	0
2	23	21	0	0	0
2	23	22	0	0	0
2	23	23	0	0	0
2	24	0	0	0	0
2	24	1	0	0	0
2	24	2	0	0	0
2	24	3	0	0	0
2	24	4	0	0	0
2	24	5	0	0	0
2	24	6	0	0	0
2	24	7	-491293	-491293	0
2	24	8	-1157402	-1157402	0
2	24	9	-3283250	-3283250	0
2	24	10	-3905025	-3905025	0
2	24	11	-4219218	-4219218	0
2	24	12	-3536162	-3536162	0
2	24	13	-3905413	-3905413	0

2	24	14	-2898347	-2898347	0
2	24	15	-2124913	-2124913	0
2	24	16	-419372	-419372	0
2	24	17	0	0	0
2	24	18	0	0	0
2	24	19	0	0	0
2	24	20	0	0	0
2	24	21	0	0	0
2	24	22	0	0	0
2	24	23	0	0	0
2	25	0	0	0	0
2	25	1	0	0	0
2	25	2	0	0	0
2	25	3	0	0	0
2	25	4	0	0	0
2	25	5	0	0	0
2	25	6	0	0	0
2	25	7	-222412	-222412	0
2	25	8	-254346	-254346	0
2	25	9	-545118	-545118	0
2	25	10	-312034	-312034	0
2	25	11	-1150897	-1150897	0
2	25	12	-595126	-595126	0
2	25	13	-376004	-376004	0
2	25	14	-324179	-324179	0
2	25	15	-173308	-173308	0
2	25	16	-87145	-87145	0
2	25	17	0	0	0
2	25	18	0	0	0
2	25	19	0	0	0
2	25	20	0	0	0
2	25	21	0	0	0
2	25	22	0	0	0
2	25	23	0	0	0
2	26	0	0	0	0
2	26	1	0	0	0
2	26	2	0	0	0
2	26	3	0	0	0
2	26	4	0	0	0
2	26	5	0	0	0
2	26	6	0	0	0
2	26	7	-352425	-352425	0
2	26	8	-1628744	-1628744	0
2	26	9	-2997413	-2997413	0

2	26	10	-2871625	-2871625	0
2	26	11	-2295762	-2295762	0
2	26	12	-3768523	-3768523	0
2	26	13	-4211627	-4211627	0
2	26	14	-3490119	-3490119	0
2	26	15	-2443720	-2443720	0
2	26	16	-1094564	-1094564	0
2	26	17	0	0	0
2	26	18	0	0	0
2	26	19	0	0	0
2	26	20	0	0	0
2	26	21	0	0	0
2	26	22	0	0	0
2	26	23	0	0	0
2	27	0	0	0	0
2	27	1	0	0	0
2	27	2	0	0	0
2	27	3	0	0	0
2	27	4	0	0	0
2	27	5	0	0	0
2	27	6	0	0	0
2	27	7	-1245995	-1245995	0
2	27	8	-1724560	-1724560	0
2	27	9	-3675318	-3675318	0
2	27	10	-4339403	-4339403	0
2	27	11	-4497402	-4497402	0
2	27	12	-4444006	-4444006	0
2	27	13	-4086471	-4086471	0
2	27	14	-3382466	-3382466	0
2	27	15	-2372316	-2372316	0
2	27	16	-1084098	-1084098	0
2	27	17	0	0	0
2	27	18	0	0	0
2	27	19	0	0	0
2	27	20	0	0	0
2	27	21	0	0	0
2	27	22	0	0	0
2	27	23	0	0	0
2	28	0	0	0	0
2	28	1	0	0	0
2	28	2	0	0	0
2	28	3	0	0	0
2	28	4	0	0	0
2	28	5	0	0	0

2	28	6	0	0	0
2	28	7	-227998	-227998	0
2	28	8	-490376	-490376	0
2	28	9	-946948	-946948	0
2	28	10	-933003	-933003	0
2	28	11	-1856244	-1856244	0
2	28	12	-1627166	-1627166	0
2	28	13	-1248470	-1248470	0
2	28	14	-996318	-996318	0
2	28	15	-834870	-834870	0
2	28	16	-95671	-95671	0
2	28	17	0	0	0
2	28	18	0	0	0
2	28	19	0	0	0
2	28	20	0	0	0
2	28	21	0	0	0
2	28	22	0	0	0
2	28	23	0	0	0
3	1	0	0	0	0
3	1	1	0	0	0
3	1	2	0	0	0
3	1	3	0	0	0
3	1	4	0	0	0
3	1	5	0	0	0
3	1	6	-55721	-55721	0
3	1	7	-1077794	-1077794	0
3	1	8	-362540	-362540	0
3	1	9	-362518	-362518	0
3	1	10	-570569	-570569	0
3	1	11	-965899	-965899	0
3	1	12	-1626889	-1626889	0
3	1	13	-829875	-829875	0
3	1	14	-642384	-642384	0
3	1	15	-122909	-122909	0
3	1	16	-433828	-433828	0
3	1	17	0	0	0
3	1	18	0	0	0
3	1	19	0	0	0
3	1	20	0	0	0
3	1	21	0	0	0
3	1	22	0	0	0
3	1	23	0	0	0
3	2	0	0	0	0
3	2	1	0	0	0

3	2	2	0	0	0
3	2	3	0	0	0
3	2	4	0	0	0
3	2	5	0	0	0
3	2	6	-69110	-69110	0
3	2	7	-212552	-212552	0
3	2	8	-757693	-757693	0
3	2	9	-1829673	-1829673	0
3	2	10	-2549445	-2549445	0
3	2	11	-2595768	-2595768	0
3	2	12	-1924385	-1924385	0
3	2	13	-1221103	-1221103	0
3	2	14	-952831	-952831	0
3	2	15	-979643	-979643	0
3	2	16	-367106	-367106	0
3	2	17	0	0	0
3	2	18	0	0	0
3	2	19	0	0	0
3	2	20	0	0	0
3	2	21	0	0	0
3	2	22	0	0	0
3	2	23	0	0	0
3	3	0	0	0	0
3	3	1	0	0	0
3	3	2	0	0	0
3	3	3	0	0	0
3	3	4	0	0	0
3	3	5	0	0	0
3	3	6	-5312	-5312	0
3	3	7	-105789	-105789	0
3	3	8	-246969	-246969	0
3	3	9	-292177	-292177	0
3	3	10	-609472	-609472	0
3	3	11	-948156	-948156	0
3	3	12	-495965	-495965	0
3	3	13	-2132297	-2132297	0
3	3	14	-2481795	-2481795	0
3	3	15	-2286430	-2286430	0
3	3	16	-1044421	-1044421	0
3	3	17	0	0	0
3	3	18	0	0	0
3	3	19	0	0	0
3	3	20	0	0	0
3	3	21	0	0	0

3	3	22	0	0	0
3	3	23	0	0	0
3	4	0	0	0	0
3	4	1	0	0	0
3	4	2	0	0	0
3	4	3	0	0	0
3	4	4	0	0	0
3	4	5	0	0	0
3	4	6	-49000	-49000	0
3	4	7	-211671	-211671	0
3	4	8	-490879	-490879	0
3	4	9	-819411	-819411	0
3	4	10	-1524543	-1524543	0
3	4	11	-2096634	-2096634	0
3	4	12	-1697133	-1697133	0
3	4	13	-1347339	-1347339	0
3	4	14	-682181	-682181	0
3	4	15	-1189882	-1189882	0
3	4	16	-887214	-887214	0
3	4	17	-59116	-59116	0
3	4	18	0	0	0
3	4	19	0	0	0
3	4	20	0	0	0
3	4	21	0	0	0
3	4	22	0	0	0
3	4	23	0	0	0
3	5	0	0	0	0
3	5	1	0	0	0
3	5	2	0	0	0
3	5	3	0	0	0
3	5	4	0	0	0
3	5	5	0	0	0
3	5	6	-179111	-179111	0
3	5	7	-1344619	-1344619	0
3	5	8	-2668616	-2668616	0
3	5	9	-3710068	-3710068	0
3	5	10	-4391219	-3732536	-658683
3	5	11	-4692360	-4223124	-469236
3	5	12	-4664021	-3731217	-932804
3	5	13	-4271778	-4271778	0
3	5	14	-3590989	-3590989	0
3	5	15	-2515692	-2515692	0
3	5	16	-1171545	-1171545	0
3	5	17	-121076	-121076	0

3	5	18	0	0	0
3	5	19	0	0	0
3	5	20	0	0	0
3	5	21	0	0	0
3	5	22	0	0	0
3	5	23	0	0	0
3	6	0	0	0	0
3	6	1	0	0	0
3	6	2	0	0	0
3	6	3	0	0	0
3	6	4	0	0	0
3	6	5	0	0	0
3	6	6	-234140	-234140	0
3	6	7	-1457012	-1457012	0
3	6	8	-2825161	-2825161	0
3	6	9	-3825560	-3825560	0
3	6	10	-4341480	-4341480	0
3	6	11	-4623104	-4623104	0
3	6	12	-4550849	-4550849	0
3	6	13	-4159640	-4159640	0
3	6	14	-3460196	-3460196	0
3	6	15	-2446374	-2446374	0
3	6	16	-1178674	-1178674	0
3	6	17	-128140	-128140	0
3	6	18	0	0	0
3	6	19	0	0	0
3	6	20	0	0	0
3	6	21	0	0	0
3	6	22	0	0	0
3	6	23	0	0	0
3	7	0	0	0	0
3	7	1	0	0	0
3	7	2	0	0	0
3	7	3	0	0	0
3	7	4	0	0	0
3	7	5	0	0	0
3	7	6	-178392	-178392	0
3	7	7	-1273469	-1273469	0
3	7	8	-2542782	-2542782	0
3	7	9	-3506373	-3506373	0
3	7	10	-4147138	-4147138	0
3	7	11	-4439213	-3773331	-665882
3	7	12	-4426110	-3762193	-663916
3	7	13	-4075894	-4075894	0

3	7	14	-3299865	-3299865	0
3	7	15	-2332489	-2332489	0
3	7	16	-1117606	-1117606	0
3	7	17	-84234	-84234	0
3	7	18	0	0	0
3	7	19	0	0	0
3	7	20	0	0	0
3	7	21	0	0	0
3	7	22	0	0	0
3	7	23	0	0	0
3	8	0	0	0	0
3	8	1	0	0	0
3	8	2	0	0	0
3	8	3	0	0	0
3	8	4	0	0	0
3	8	5	0	0	0
3	8	6	-99287	-99287	0
3	8	7	-1025191	-1025191	0
3	8	8	-1999098	-1999098	0
3	8	9	-3311778	-3311778	0
3	8	10	-3955505	-3955505	0
3	8	11	-3742041	-3742041	0
3	8	12	-4164144	-4164144	0
3	8	13	-3846833	-3846833	0
3	8	14	-2029744	-2029744	0
3	8	15	-1953360	-1953360	0
3	8	16	-998282	-998282	0
3	8	17	-77301	-77301	0
3	8	18	0	0	0
3	8	19	0	0	0
3	8	20	0	0	0
3	8	21	0	0	0
3	8	22	0	0	0
3	8	23	0	0	0
3	9	0	0	0	0
3	9	1	0	0	0
3	9	2	0	0	0
3	9	3	0	0	0
3	9	4	0	0	0
3	9	5	0	0	0
3	9	6	-145562	-145562	0
3	9	7	-916358	-916358	0
3	9	8	-1862876	-1862876	0
3	9	9	-2784094	-2784094	0

3	9	10	-2823058	-2823058	0
3	9	11	-3152712	-3152712	0
3	9	12	-3700694	-3700694	0
3	9	13	-3127142	-3127142	0
3	9	14	-2344334	-2344334	0
3	9	15	-1652753	-1652753	0
3	9	16	-1194215	-1194215	0
3	9	17	-153115	-153115	0
3	9	18	0	0	0
3	9	19	0	0	0
3	9	20	0	0	0
3	9	21	0	0	0
3	9	22	0	0	0
3	9	23	0	0	0
3	10	0	0	0	0
3	10	1	0	0	0
3	10	2	0	0	0
3	10	3	0	0	0
3	10	4	0	0	0
3	10	5	0	0	0
3	10	6	-257217	-257217	0
3	10	7	-932159	-932159	0
3	10	8	-2698610	-2698610	0
3	10	9	-3690420	-3690420	0
3	10	10	-2434587	-2434587	0
3	10	11	-2492169	-2492169	0
3	10	12	-2460425	-2460425	0
3	10	13	-1876363	-1876363	0
3	10	14	-1533913	-1533913	0
3	10	15	-1908172	-1908172	0
3	10	16	-633626	-633626	0
3	10	17	-162468	-162468	0
3	10	18	0	0	0
3	10	19	0	0	0
3	10	20	0	0	0
3	10	21	0	0	0
3	10	22	0	0	0
3	10	23	0	0	0
3	11	0	0	0	0
3	11	1	0	0	0
3	11	2	0	0	0
3	11	3	0	0	0
3	11	4	0	0	0
3	11	5	0	0	0

3	11	6	-270967	-270967	0
3	11	7	-1411162	-1411162	0
3	11	8	-2672902	-2672902	0
3	11	9	-3607240	-3607240	0
3	11	10	-4200756	-3780680	-420076
3	11	11	-4456540	-3565232	-891308
3	11	12	-4234780	-3811302	-423478
3	11	13	-3924632	-3924632	0
3	11	14	-3267309	-3267309	0
3	11	15	-2323738	-2323738	0
3	11	16	-1144676	-1144676	0
3	11	17	-156332	-156332	0
3	11	18	0	0	0
3	11	19	0	0	0
3	11	20	0	0	0
3	11	21	0	0	0
3	11	22	0	0	0
3	11	23	0	0	0
3	12	0	0	0	0
3	12	1	0	0	0
3	12	2	0	0	0
3	12	3	0	0	0
3	12	4	0	0	0
3	12	5	0	0	0
3	12	6	-260881	-260881	0
3	12	7	-1393654	-1393654	0
3	12	8	-2543080	-2543080	0
3	12	9	-3406952	-3406952	0
3	12	10	-3397259	-3397259	0
3	12	11	-3753121	-3753121	0
3	12	12	-4108418	-4108418	0
3	12	13	-3772782	-3772782	0
3	12	14	-3146647	-3146647	0
3	12	15	-1855366	-1855366	0
3	12	16	-1000249	-1000249	0
3	12	17	-108218	-108218	0
3	12	18	0	0	0
3	12	19	0	0	0
3	12	20	0	0	0
3	12	21	0	0	0
3	12	22	0	0	0
3	12	23	0	0	0
3	13	0	0	0	0
3	13	1	0	0	0

3	13	2	0	0	0
3	13	3	0	0	0
3	13	4	0	0	0
3	13	5	0	0	0
3	13	6	-42194	-42194	0
3	13	7	-239782	-239782	0
3	13	8	-716302	-716302	0
3	13	9	-1183200	-1183200	0
3	13	10	-2744343	-2744343	0
3	13	11	-2128398	-2128398	0
3	13	12	-3096552	-3096552	0
3	13	13	-3695263	-3695263	0
3	13	14	-3027864	-3027864	0
3	13	15	-2076786	-2076786	0
3	13	16	-1019131	-1019131	0
3	13	17	-127728	-127728	0
3	13	18	0	0	0
3	13	19	0	0	0
3	13	20	0	0	0
3	13	21	0	0	0
3	13	22	0	0	0
3	13	23	0	0	0
3	14	0	0	0	0
3	14	1	0	0	0
3	14	2	0	0	0
3	14	3	0	0	0
3	14	4	0	0	0
3	14	5	0	0	0
3	14	6	-279313	-279313	0
3	14	7	-407465	-407465	0
3	14	8	-927554	-927554	0
3	14	9	-3510486	-3510486	0
3	14	10	-4030093	-4030093	0
3	14	11	-4272313	-4058697	-213616
3	14	12	-4212320	-4212320	0
3	14	13	-3864332	-3864332	0
3	14	14	-3261954	-3261954	0
3	14	15	-2325174	-2325174	0
3	14	16	-1169964	-1169964	0
3	14	17	-179782	-179782	0
3	14	18	0	0	0
3	14	19	0	0	0
3	14	20	0	0	0
3	14	21	0	0	0

3	14	22	0	0	0
3	14	23	0	0	0
3	15	0	0	0	0
3	15	1	0	0	0
3	15	2	0	0	0
3	15	3	0	0	0
3	15	4	0	0	0
3	15	5	0	0	0
3	15	6	-16077	-16077	0
3	15	7	-128281	-128281	0
3	15	8	-441362	-441362	0
3	15	9	-702592	-702592	0
3	15	10	-1443222	-1443222	0
3	15	11	-1534154	-1534154	0
3	15	12	-4196077	-4196077	0
3	15	13	-3773559	-3773559	0
3	15	14	-3116533	-3116533	0
3	15	15	-641994	-641994	0
3	15	16	-325139	-325139	0
3	15	17	-37164	-37164	0
3	15	18	0	0	0
3	15	19	0	0	0
3	15	20	0	0	0
3	15	21	0	0	0
3	15	22	0	0	0
3	15	23	0	0	0
3	16	0	0	0	0
3	16	1	0	0	0
3	16	2	0	0	0
3	16	3	0	0	0
3	16	4	0	0	0
3	16	5	0	0	0
3	16	6	-134913	-134913	0
3	16	7	-96582	-96582	0
3	16	8	-713625	-713625	0
3	16	9	-828000	-828000	0
3	16	10	-1610620	-1610620	0
3	16	11	-1411807	-1411807	0
3	16	12	-738289	-738289	0
3	16	13	-899758	-899758	0
3	16	14	-369109	-369109	0
3	16	15	-551041	-551041	0
3	16	16	-354216	-354216	0
3	16	17	-47773	-47773	0

3	16	18	0	0	0
3	16	19	0	0	0
3	16	20	0	0	0
3	16	21	0	0	0
3	16	22	0	0	0
3	16	23	0	0	0
3	17	0	0	0	0
3	17	1	0	0	0
3	17	2	0	0	0
3	17	3	0	0	0
3	17	4	0	0	0
3	17	5	0	0	0
3	17	6	-48158	-48158	0
3	17	7	-332525	-332525	0
3	17	8	-571971	-571971	0
3	17	9	-1095134	-1095134	0
3	17	10	-1434552	-1434552	0
3	17	11	-2036508	-2036508	0
3	17	12	-1625131	-1625131	0
3	17	13	-1450722	-1450722	0
3	17	14	-3323044	-3323044	0
3	17	15	-2344539	-2344539	0
3	17	16	-1213966	-1213966	0
3	17	17	-213796	-213796	0
3	17	18	0	0	0
3	17	19	0	0	0
3	17	20	0	0	0
3	17	21	0	0	0
3	17	22	0	0	0
3	17	23	0	0	0
3	18	0	0	0	0
3	18	1	0	0	0
3	18	2	0	0	0
3	18	3	0	0	0
3	18	4	0	0	0
3	18	5	0	0	0
3	18	6	-335961	-335961	0
3	18	7	-1445199	-1445199	0
3	18	8	-2556530	-2556530	0
3	18	9	-3398753	-3398753	0
3	18	10	-4004584	-4004584	0
3	18	11	-4234431	-4234431	0
3	18	12	-4186226	-4186226	0
3	18	13	-3841930	-3841930	0

3	18	14	-3221016	-3221016	0
3	18	15	-2325296	-2325296	0
3	18	16	-1180715	-1180715	0
3	18	17	-209763	-209763	0
3	18	18	0	0	0
3	18	19	0	0	0
3	18	20	0	0	0
3	18	21	0	0	0
3	18	22	0	0	0
3	18	23	0	0	0
3	19	0	0	0	0
3	19	1	0	0	0
3	19	2	0	0	0
3	19	3	0	0	0
3	19	4	0	0	0
3	19	5	0	0	0
3	19	6	-276306	-276306	0
3	19	7	-904606	-904606	0
3	19	8	-2574908	-2574908	0
3	19	9	-3362643	-3362643	0
3	19	10	-3884626	-3884626	0
3	19	11	-4104755	-4104755	0
3	19	12	-4031598	-4031598	0
3	19	13	-3712736	-3712736	0
3	19	14	-3118480	-3118480	0
3	19	15	-2229147	-2229147	0
3	19	16	-1147867	-1147867	0
3	19	17	-207437	-207437	0
3	19	18	0	0	0
3	19	19	0	0	0
3	19	20	0	0	0
3	19	21	0	0	0
3	19	22	0	0	0
3	19	23	0	0	0
3	20	0	0	0	0
3	20	1	0	0	0
3	20	2	0	0	0
3	20	3	0	0	0
3	20	4	0	0	0
3	20	5	0	0	0
3	20	6	-381707	-381707	0
3	20	7	-1495884	-1495884	0
3	20	8	-2591093	-2591093	0
3	20	9	-3396583	-3396583	0

3	20	10	-3884947	-3884947	0
3	20	11	-4111007	-4111007	0
3	20	12	-4073843	-4073843	0
3	20	13	-3737614	-3737614	0
3	20	14	-3158601	-3158601	0
3	20	15	-2290954	-2290954	0
3	20	16	-1214481	-1214481	0
3	20	17	-226250	-226250	0
3	20	18	0	0	0
3	20	19	0	0	0
3	20	20	0	0	0
3	20	21	0	0	0
3	20	22	0	0	0
3	20	23	0	0	0
3	21	0	0	0	0
3	21	1	0	0	0
3	21	2	0	0	0
3	21	3	0	0	0
3	21	4	0	0	0
3	21	5	0	0	0
3	21	6	-414794	-414794	0
3	21	7	-593184	-593184	0
3	21	8	-1203954	-1203954	0
3	21	9	-3433990	-3433990	0
3	21	10	-3909214	-3909214	0
3	21	11	-4116689	-4116689	0
3	21	12	-4067356	-4067356	0
3	21	13	-3734526	-3734526	0
3	21	14	-3137196	-3137196	0
3	21	15	-2260755	-2260755	0
3	21	16	-1204410	-1204410	0
3	21	17	-227431	-227431	0
3	21	18	0	0	0
3	21	19	0	0	0
3	21	20	0	0	0
3	21	21	0	0	0
3	21	22	0	0	0
3	21	23	0	0	0
3	22	0	0	0	0
3	22	1	0	0	0
3	22	2	0	0	0
3	22	3	0	0	0
3	22	4	0	0	0
3	22	5	0	0	0

3	22	6	-418428	-418428	0
3	22	7	-1538348	-1538348	0
3	22	8	-2602021	-2602021	0
3	22	9	-3402718	-3402718	0
3	22	10	-3894768	-3894768	0
3	22	11	-4107133	-4107133	0
3	22	12	-4063143	-4063143	0
3	22	13	-3725952	-3725952	0
3	22	14	-3163141	-3163141	0
3	22	15	-2296001	-2296001	0
3	22	16	-1202478	-1202478	0
3	22	17	-228458	-228458	0
3	22	18	0	0	0
3	22	19	0	0	0
3	22	20	0	0	0
3	22	21	0	0	0
3	22	22	0	0	0
3	22	23	0	0	0
3	23	0	0	0	0
3	23	1	0	0	0
3	23	2	0	0	0
3	23	3	0	0	0
3	23	4	0	0	0
3	23	5	0	0	0
3	23	6	-15423	-15423	0
3	23	7	-178600	-178600	0
3	23	8	-578944	-578944	0
3	23	9	-1060073	-1060073	0
3	23	10	-2522304	-2522304	0
3	23	11	-4204316	-4204316	0
3	23	12	-4122570	-4122570	0
3	23	13	-3803867	-3803867	0
3	23	14	-3230628	-3230628	0
3	23	15	-1987258	-1987258	0
3	23	16	-694466	-694466	0
3	23	17	-152291	-152291	0
3	23	18	0	0	0
3	23	19	0	0	0
3	23	20	0	0	0
3	23	21	0	0	0
3	23	22	0	0	0
3	23	23	0	0	0
3	24	0	0	0	0
3	24	1	0	0	0

3	24	2	0	0	0
3	24	3	0	0	0
3	24	4	0	0	0
3	24	5	0	0	0
3	24	6	-178480	-178480	0
3	24	7	-1462798	-1462798	0
3	24	8	-1755935	-1755935	0
3	24	9	-3187539	-3187539	0
3	24	10	-2751538	-2751538	0
3	24	11	-2973902	-2973902	0
3	24	12	-899346	-899346	0
3	24	13	-3031051	-3031051	0
3	24	14	-2950481	-2950481	0
3	24	15	-1407729	-1407729	0
3	24	16	-859847	-859847	0
3	24	17	-185790	-185790	0
3	24	18	0	0	0
3	24	19	0	0	0
3	24	20	0	0	0
3	24	21	0	0	0
3	24	22	0	0	0
3	24	23	0	0	0
3	25	0	0	0	0
3	25	1	0	0	0
3	25	2	0	0	0
3	25	3	0	0	0
3	25	4	0	0	0
3	25	5	0	0	0
3	25	6	-106009	-106009	0
3	25	7	-448597	-448597	0
3	25	8	-676660	-676660	0
3	25	9	-1107968	-1107968	0
3	25	10	-884750	-884750	0
3	25	11	-1004495	-1004495	0
3	25	12	-1849903	-1849903	0
3	25	13	-1453273	-1453273	0
3	25	14	-1174752	-1174752	0
3	25	15	-923608	-923608	0
3	25	16	-514693	-514693	0
3	25	17	-100147	-100147	0
3	25	18	0	0	0
3	25	19	0	0	0
3	25	20	0	0	0
3	25	21	0	0	0

3	25	22	0	0	0
3	25	23	0	0	0
3	26	0	0	0	0
3	26	1	0	0	0
3	26	2	0	0	0
3	26	3	0	0	0
3	26	4	0	0	0
3	26	5	0	0	0
3	26	6	-507005	-507005	0
3	26	7	-1675906	-1675906	0
3	26	8	-321376	-321376	0
3	26	9	-1145714	-1145714	0
3	26	10	-4520008	-3616007	-904002
3	26	11	-4785495	-3828396	-957099
3	26	12	-4812730	-3850184	-962546
3	26	13	-4429205	-3764824	-664381
3	26	14	-3757872	-3757872	0
3	26	15	-2776789	-2776789	0
3	26	16	-1468427	-1468427	0
3	26	17	-292578	-292578	0
3	26	18	0	0	0
3	26	19	0	0	0
3	26	20	0	0	0
3	26	21	0	0	0
3	26	22	0	0	0
3	26	23	0	0	0
3	27	0	0	0	0
3	27	1	0	0	0
3	27	2	0	0	0
3	27	3	0	0	0
3	27	4	0	0	0
3	27	5	0	0	0
3	27	6	-615196	-615196	0
3	27	7	-1983736	-1983736	0
3	27	8	-3254106	-3254106	0
3	27	9	-4173180	-3338544	-834636
3	27	10	-4758497	-3806797	-951699
3	27	11	-4988000	-3990400	-997600
3	27	12	-4870940	-3896752	-974188
3	27	13	-4492556	-3594045	-898511
3	27	14	-3783658	-3783658	0
3	27	15	-2675406	-2675406	0
3	27	16	-1437091	-1437091	0
3	27	17	-294977	-294977	0

3	27	18	0	0	0
3	27	19	0	0	0
3	27	20	0	0	0
3	27	21	0	0	0
3	27	22	0	0	0
3	27	23	0	0	0
3	28	0	0	0	0
3	28	1	0	0	0
3	28	2	0	0	0
3	28	3	0	0	0
3	28	4	0	0	0
3	28	5	0	0	0
3	28	6	-123492	-123492	0
3	28	7	-764003	-764003	0
3	28	8	-2764027	-2764027	0
3	28	9	-3593978	-3593978	0
3	28	10	-697315	-697315	0
3	28	11	-340017	-340017	0
3	28	12	-548659	-548659	0
3	28	13	-1177431	-1177431	0
3	28	14	-870415	-870415	0
3	28	15	-430183	-430183	0
3	28	16	-704941	-704941	0
3	28	17	-271987	-271987	0
3	28	18	0	0	0
3	28	19	0	0	0
3	28	20	0	0	0
3	28	21	0	0	0
3	28	22	0	0	0
3	28	23	0	0	0
3	29	0	0	0	0
3	29	1	0	0	0
3	29	2	0	0	0
3	29	3	0	0	0
3	29	4	0	0	0
3	29	5	0	0	0
3	29	6	-21318	-21318	0
3	29	7	-253561	-253561	0
3	29	8	-571252	-571252	0
3	29	9	-2598481	-2598481	0
3	29	10	-1229343	-1229343	0
3	29	11	-1328363	-1328363	0
3	29	12	-1110931	-1110931	0
3	29	13	-930148	-930148	0

3	29	14	-1052607	-1052607	0
3	29	15	-433014	-433014	0
3	29	16	-267653	-267653	0
3	29	17	-15940	-15940	0
3	29	18	0	0	0
3	29	19	0	0	0
3	29	20	0	0	0
3	29	21	0	0	0
3	29	22	0	0	0
3	29	23	0	0	0
3	30	0	0	0	0
3	30	1	0	0	0
3	30	2	0	0	0
3	30	3	0	0	0
3	30	4	0	0	0
3	30	5	0	0	0
3	30	6	-654420	-654420	0
3	30	7	-1976836	-1976836	0
3	30	8	-3224597	-3224597	0
3	30	9	-4085542	-3472711	-612831
3	30	10	-4535223	-3401417	-1133806
3	30	11	-4736120	-3788896	-947224
3	30	12	-4627439	-3701951	-925488
3	30	13	-4254158	-3403326	-850832
3	30	14	-3595089	-3595089	0
3	30	15	-2639438	-2639438	0
3	30	16	-1416542	-1416542	0
3	30	17	-305689	-305689	0
3	30	18	0	0	0
3	30	19	0	0	0
3	30	20	0	0	0
3	30	21	0	0	0
3	30	22	0	0	0
3	30	23	0	0	0
3	31	0	0	0	0
3	31	1	0	0	0
3	31	2	0	0	0
3	31	3	0	0	0
3	31	4	0	0	0
3	31	5	0	0	0
3	31	6	-129940	-129940	0
3	31	7	-140029	-140029	0
3	31	8	-430971	-430971	0
3	31	9	-693807	-693807	0

3	31	10	-967094	-967094	0
3	31	11	-939777	-939777	0
3	31	12	-1524606	-1524606	0
3	31	13	-725859	-725859	0
3	31	14	-881096	-881096	0
3	31	15	-477472	-477472	0
3	31	16	-436871	-436871	0
3	31	17	-319330	-319330	0
3	31	18	0	0	0
3	31	19	0	0	0
3	31	20	0	0	0
3	31	21	0	0	0
3	31	22	0	0	0
3	31	23	0	0	0
4	1	0	0	0	0
4	1	1	0	0	0
4	1	2	0	0	0
4	1	3	0	0	0
4	1	4	0	0	0
4	1	5	0	0	0
4	1	6	-673873	-673873	0
4	1	7	-1952208	-1952208	0
4	1	8	-3088650	-3088650	0
4	1	9	-3912045	-3912045	0
4	1	10	-3204880	-3204880	0
4	1	11	-4662845	-3730276	-932569
4	1	12	-4536659	-4082993	-453666
4	1	13	-4165084	-4165084	0
4	1	14	-3534155	-3534155	0
4	1	15	-2593040	-2593040	0
4	1	16	-1412688	-1412688	0
4	1	17	-321935	-321935	0
4	1	18	0	0	0
4	1	19	0	0	0
4	1	20	0	0	0
4	1	21	0	0	0
4	1	22	0	0	0
4	1	23	0	0	0
4	2	0	0	0	0
4	2	1	0	0	0
4	2	2	0	0	0
4	2	3	0	0	0
4	2	4	0	0	0
4	2	5	0	0	0

4	2	6	-446341	-446341	0
4	2	7	-1534513	-1534513	0
4	2	8	-2135272	-2135272	0
4	2	9	-2641263	-2641263	0
4	2	10	-2810458	-2810458	0
4	2	11	-2691873	-2691873	0
4	2	12	-2267392	-2267392	0
4	2	13	-2245977	-2245977	0
4	2	14	-2888395	-2888395	0
4	2	15	-2524597	-2524597	0
4	2	16	-1425944	-1425944	0
4	2	17	-328964	-328964	0
4	2	18	0	0	0
4	2	19	0	0	0
4	2	20	0	0	0
4	2	21	0	0	0
4	2	22	0	0	0
4	2	23	0	0	0
4	3	0	0	0	0
4	3	1	0	0	0
4	3	2	0	0	0
4	3	3	0	0	0
4	3	4	0	0	0
4	3	5	0	0	0
4	3	6	-731093	-731093	0
4	3	7	-2015869	-2015869	0
4	3	8	-3159897	-3159897	0
4	3	9	-3973449	-3377432	-596017
4	3	10	-4472376	-3577901	-894475
4	3	11	-4653033	-3722426	-930607
4	3	12	-4549315	-3411986	-1137329
4	3	13	-4159576	-3535640	-623936
4	3	14	-3530395	-3530395	0
4	3	15	-2448558	-2448558	0
4	3	16	-1081658	-1081658	0
4	3	17	-156828	-156828	0
4	3	18	0	0	0
4	3	19	0	0	0
4	3	20	0	0	0
4	3	21	0	0	0
4	3	22	0	0	0
4	3	23	0	0	0
4	4	0	0	0	0
4	4	1	0	0	0

4	4	2	0	0	0
4	4	3	0	0	0
4	4	4	0	0	0
4	4	5	0	0	0
4	4	6	-529790	-529790	0
4	4	7	-849212	-849212	0
4	4	8	-1595928	-1595928	0
4	4	9	-2779718	-2779718	0
4	4	10	-2883881	-2883881	0
4	4	11	-3636992	-3636992	0
4	4	12	-2374741	-2374741	0
4	4	13	-1066552	-1066552	0
4	4	14	-951547	-951547	0
4	4	15	-136477	-136477	0
4	4	16	-690989	-690989	0
4	4	17	-201578	-201578	0
4	4	18	0	0	0
4	4	19	0	0	0
4	4	20	0	0	0
4	4	21	0	0	0
4	4	22	0	0	0
4	4	23	0	0	0
4	5	0	0	0	0
4	5	1	0	0	0
4	5	2	0	0	0
4	5	3	0	0	0
4	5	4	0	0	0
4	5	5	0	0	0
4	5	6	-398317	-398317	0
4	5	7	-813078	-813078	0
4	5	8	-1247786	-1247786	0
4	5	9	-3900380	-3315323	-585057
4	5	10	-3323602	-3323602	0
4	5	11	-903181	-903181	0
4	5	12	-2164795	-2164795	0
4	5	13	-1915685	-1915685	0
4	5	14	-2148820	-2148820	0
4	5	15	-1571687	-1571687	0
4	5	16	-1448771	-1448771	0
4	5	17	-353939	-353939	0
4	5	18	0	0	0
4	5	19	0	0	0
4	5	20	0	0	0
4	5	21	0	0	0

4	5	22	0	0	0
4	5	23	0	0	0
4	6	0	0	0	0
4	6	1	0	0	0
4	6	2	0	0	0
4	6	3	0	0	0
4	6	4	0	0	0
4	6	5	0	0	0
4	6	6	-801940	-801940	0
4	6	7	-2130558	-2130558	0
4	6	8	-3252320	-3252320	0
4	6	9	-4048395	-3441136	-607259
4	6	10	-4536922	-3629537	-907384
4	6	11	-4731618	-3548713	-1182904
4	6	12	-4632840	-3474630	-1158210
4	6	13	-4234431	-3387545	-846886
4	6	14	-3573734	-3573734	0
4	6	15	-2649031	-2649031	0
4	6	16	-1505382	-1505382	0
4	6	17	-352116	-352116	0
4	6	18	0	0	0
4	6	19	0	0	0
4	6	20	0	0	0
4	6	21	0	0	0
4	6	22	0	0	0
4	6	23	0	0	0
4	7	0	0	0	0
4	7	1	0	0	0
4	7	2	0	0	0
4	7	3	0	0	0
4	7	4	0	0	0
4	7	5	-26988	-26988	0
4	7	6	-596659	-596659	0
4	7	7	-1811752	-1811752	0
4	7	8	-2361889	-2361889	0
4	7	9	-2956406	-2956406	0
4	7	10	-3021170	-3021170	0
4	7	11	-3083598	-3083598	0
4	7	12	-2215894	-2215894	0
4	7	13	-3050178	-3050178	0
4	7	14	-1250182	-1250182	0
4	7	15	-982729	-982729	0
4	7	16	-311855	-311855	0
4	7	17	-116685	-116685	0

4	7	18	0	0	0
4	7	19	0	0	0
4	7	20	0	0	0
4	7	21	0	0	0
4	7	22	0	0	0
4	7	23	0	0	0
4	8	0	0	0	0
4	8	1	0	0	0
4	8	2	0	0	0
4	8	3	0	0	0
4	8	4	0	0	0
4	8	5	0	0	0
4	8	6	-167110	-167110	0
4	8	7	-658446	-658446	0
4	8	8	-340471	-340471	0
4	8	9	-1567535	-1567535	0
4	8	10	-1246723	-1246723	0
4	8	11	-2101473	-2101473	0
4	8	12	-2453190	-2453190	0
4	8	13	-2360721	-2360721	0
4	8	14	-2155978	-2155978	0
4	8	15	-1870192	-1870192	0
4	8	16	-1225528	-1225528	0
4	8	17	-313952	-313952	0
4	8	18	0	0	0
4	8	19	0	0	0
4	8	20	0	0	0
4	8	21	0	0	0
4	8	22	0	0	0
4	8	23	0	0	0
4	9	0	0	0	0
4	9	1	0	0	0
4	9	2	0	0	0
4	9	3	0	0	0
4	9	4	0	0	0
4	9	5	-62627	-62627	0
4	9	6	-801379	-801379	0
4	9	7	-2049441	-2049441	0
4	9	8	-3135209	-3135209	0
4	9	9	-3903985	-3903985	0
4	9	10	-4396895	-3517516	-879379
4	9	11	-1565944	-1565944	0
4	9	12	-2813190	-2813190	0
4	9	13	-4233700	-3810330	-423370

4	9	14	-3559784	-3559784	0
4	9	15	-2655726	-2655726	0
4	9	16	-1506708	-1506708	0
4	9	17	-376045	-376045	0
4	9	18	0	0	0
4	9	19	0	0	0
4	9	20	0	0	0
4	9	21	0	0	0
4	9	22	0	0	0
4	9	23	0	0	0
4	10	0	0	0	0
4	10	1	0	0	0
4	10	2	0	0	0
4	10	3	0	0	0
4	10	4	0	0	0
4	10	5	-73401	-73401	0
4	10	6	-870310	-870310	0
4	10	7	-2140759	-2140759	0
4	10	8	-3216743	-3216743	0
4	10	9	-3996556	-3397073	-599483
4	10	10	-4479591	-3583673	-895918
4	10	11	-4688858	-3282200	-1406657
4	10	12	-4620111	-3465083	-1155028
4	10	13	-4259357	-3194518	-1064839
4	10	14	-3640140	-3640140	0
4	10	15	-2716296	-2716296	0
4	10	16	-1526327	-1526327	0
4	10	17	-384105	-384105	0
4	10	18	0	0	0
4	10	19	0	0	0
4	10	20	0	0	0
4	10	21	0	0	0
4	10	22	0	0	0
4	10	23	0	0	0
4	11	0	0	0	0
4	11	1	0	0	0
4	11	2	0	0	0
4	11	3	0	0	0
4	11	4	0	0	0
4	11	5	-5304	-5304	0
4	11	6	-267052	-267052	0
4	11	7	-1124184	-1124184	0
4	11	8	-422049	-422049	0
4	11	9	-3086004	-3086004	0

4	11	10	-2698563	-2698563	0
4	11	11	-3535532	-3535532	0
4	11	12	-2692237	-2692237	0
4	11	13	-3148831	-3148831	0
4	11	14	-3227177	-3227177	0
4	11	15	-1813772	-1813772	0
4	11	16	-985852	-985852	0
4	11	17	-66232	-66232	0
4	11	18	0	0	0
4	11	19	0	0	0
4	11	20	0	0	0
4	11	21	0	0	0
4	11	22	0	0	0
4	11	23	0	0	0
4	12	0	0	0	0
4	12	1	0	0	0
4	12	2	0	0	0
4	12	3	0	0	0
4	12	4	0	0	0
4	12	5	-90858	-90858	0
4	12	6	-860437	-860437	0
4	12	7	-2086148	-2086148	0
4	12	8	-3136796	-3136796	0
4	12	9	-3862345	-3089876	-772469
4	12	10	-4326405	-3244804	-1081601
4	12	11	-3701148	-2960918	-740230
4	12	12	-3973684	-3377631	-596053
4	12	13	-4101383	-3486176	-615208
4	12	14	-3461203	-3461203	0
4	12	15	-2569172	-2569172	0
4	12	16	-1447281	-1447281	0
4	12	17	-380437	-380437	0
4	12	18	0	0	0
4	12	19	0	0	0
4	12	20	0	0	0
4	12	21	0	0	0
4	12	22	0	0	0
4	12	23	0	0	0
4	13	0	0	0	0
4	13	1	0	0	0
4	13	2	0	0	0
4	13	3	0	0	0
4	13	4	0	0	0
4	13	5	-100987	-100987	0

4	13	6	-325132	-325132	0
4	13	7	-697674	-697674	0
4	13	8	-1033935	-1033935	0
4	13	9	-508954	-508954	0
4	13	10	-1622664	-1622664	0
4	13	11	-1810431	-1810431	0
4	13	12	-1766811	-1766811	0
4	13	13	-3861318	-3861318	0
4	13	14	-3187940	-3187940	0
4	13	15	-2330066	-2330066	0
4	13	16	-1341455	-1341455	0
4	13	17	-391762	-391762	0
4	13	18	0	0	0
4	13	19	0	0	0
4	13	20	0	0	0
4	13	21	0	0	0
4	13	22	0	0	0
4	13	23	0	0	0
4	14	0	0	0	0
4	14	1	0	0	0
4	14	2	0	0	0
4	14	3	0	0	0
4	14	4	0	0	0
4	14	5	-67751	-67751	0
4	14	6	-512439	-512439	0
4	14	7	-1589546	-1589546	0
4	14	8	-2896722	-2896722	0
4	14	9	-3650979	-3103332	-547647
4	14	10	-3732402	-3172541	-559860
4	14	11	-3717487	-2788116	-929372
4	14	12	-2760424	-2760424	0
4	14	13	-2593656	-2593656	0
4	14	14	-1730602	-1730602	0
4	14	15	-1688265	-1688265	0
4	14	16	-1216807	-1216807	0
4	14	17	-395886	-395886	0
4	14	18	0	0	0
4	14	19	0	0	0
4	14	20	0	0	0
4	14	21	0	0	0
4	14	22	0	0	0
4	14	23	0	0	0
4	15	0	0	0	0
4	15	1	0	0	0

4	15	2	0	0	0
4	15	3	0	0	0
4	15	4	0	0	0
4	15	5	-5186	-5186	0
4	15	6	-419262	-419262	0
4	15	7	-487517	-487517	0
4	15	8	-804310	-804310	0
4	15	9	-2014795	-2014795	0
4	15	10	-2823929	-2823929	0
4	15	11	-1414003	-1414003	0
4	15	12	-798283	-798283	0
4	15	13	-809268	-809268	0
4	15	14	-593821	-593821	0
4	15	15	-368982	-368982	0
4	15	16	-209050	-209050	0
4	15	17	-249014	-249014	0
4	15	18	0	0	0
4	15	19	0	0	0
4	15	20	0	0	0
4	15	21	0	0	0
4	15	22	0	0	0
4	15	23	0	0	0
4	16	0	0	0	0
4	16	1	0	0	0
4	16	2	0	0	0
4	16	3	0	0	0
4	16	4	0	0	0
4	16	5	-133608	-133608	0
4	16	6	-1032342	-1032342	0
4	16	7	-2363690	-2363690	0
4	16	8	-3476461	-3476461	0
4	16	9	-4293953	-3005767	-1288186
4	16	10	-4791160	-3353812	-1437348
4	16	11	-4965134	-3227337	-1737797
4	16	12	-4851885	-3396320	-1455566
4	16	13	-4453400	-3785390	-668010
4	16	14	-3784830	-3784830	0
4	16	15	-2811819	-2811819	0
4	16	16	-1614378	-1614378	0
4	16	17	-452300	-452300	0
4	16	18	0	0	0
4	16	19	0	0	0
4	16	20	0	0	0
4	16	21	0	0	0

4	16	22	0	0	0
4	16	23	0	0	0
4	17	0	0	0	0
4	17	1	0	0	0
4	17	2	0	0	0
4	17	3	0	0	0
4	17	4	0	0	0
4	17	5	-132031	-132031	0
4	17	6	-744963	-744963	0
4	17	7	-1771703	-1771703	0
4	17	8	-2802489	-2802489	0
4	17	9	-3713654	-3156606	-557048
4	17	10	-4152779	-3114585	-1038195
4	17	11	-4591324	-3443493	-1147831
4	17	12	-4219656	-3164742	-1054914
4	17	13	-4397374	-3298031	-1099344
4	17	14	-3731385	-3731385	0
4	17	15	-2795117	-2795117	0
4	17	16	-1603146	-1603146	0
4	17	17	-466977	-466977	0
4	17	18	0	0	0
4	17	19	0	0	0
4	17	20	0	0	0
4	17	21	0	0	0
4	17	22	0	0	0
4	17	23	0	0	0
4	18	0	0	0	0
4	18	1	0	0	0
4	18	2	0	0	0
4	18	3	0	0	0
4	18	4	0	0	0
4	18	5	-108898	-108898	0
4	18	6	-358744	-358744	0
4	18	7	-822213	-822213	0
4	18	8	-1153665	-1153665	0
4	18	9	-2054597	-2054597	0
4	18	10	-3687365	-2949892	-737473
4	18	11	-3831011	-3256359	-574652
4	18	12	-3623767	-3623767	0
4	18	13	-3595944	-3595944	0
4	18	14	-2768030	-2768030	0
4	18	15	-1812196	-1812196	0
4	18	16	-1060586	-1060586	0
4	18	17	-366889	-366889	0

4	18	18	0	0	0
4	18	19	0	0	0
4	18	20	0	0	0
4	18	21	0	0	0
4	18	22	0	0	0
4	18	23	0	0	0
4	19	0	0	0	0
4	19	1	0	0	0
4	19	2	0	0	0
4	19	3	0	0	0
4	19	4	0	0	0
4	19	5	-134366	-134366	0
4	19	6	-950169	-950169	0
4	19	7	-2089408	-2089408	0
4	19	8	-3232926	-3232926	0
4	19	9	-4026486	-3221189	-805297
4	19	10	-4458284	-3343713	-1114571
4	19	11	-4615620	-3461715	-1153905
4	19	12	-4513951	-3611161	-902790
4	19	13	-4171828	-3337462	-834366
4	19	14	-3562231	-3562231	0
4	19	15	-2659181	-2659181	0
4	19	16	-1536316	-1536316	0
4	19	17	-445935	-445935	0
4	19	18	0	0	0
4	19	19	0	0	0
4	19	20	0	0	0
4	19	21	0	0	0
4	19	22	0	0	0
4	19	23	0	0	0
4	20	0	0	0	0
4	20	1	0	0	0
4	20	2	0	0	0
4	20	3	0	0	0
4	20	4	0	0	0
4	20	5	-156273	-156273	0
4	20	6	-1054032	-1054032	0
4	20	7	-1900031	-1900031	0
4	20	8	-2851048	-2851048	0
4	20	9	-3633161	-3633161	0
4	20	10	-4557866	-3418400	-1139467
4	20	11	-4706850	-3294795	-1412055
4	20	12	-4605709	-3223996	-1381713
4	20	13	-4245764	-3396611	-849153

4	20	14	-3623260	-3623260	0
4	20	15	-2728354	-2728354	0
4	20	16	-1585526	-1585526	0
4	20	17	-454273	-454273	0
4	20	18	0	0	0
4	20	19	0	0	0
4	20	20	0	0	0
4	20	21	0	0	0
4	20	22	0	0	0
4	20	23	0	0	0
4	21	0	0	0	0
4	21	1	0	0	0
4	21	2	0	0	0
4	21	3	0	0	0
4	21	4	0	0	0
4	21	5	-161772	-161772	0
4	21	6	-1032623	-1032623	0
4	21	7	-2249488	-2249488	0
4	21	8	-3250000	-3250000	0
4	21	9	-3947889	-3158311	-789578
4	21	10	-4399923	-3299942	-1099981
4	21	11	-4557958	-3190570	-1367387
4	21	12	-4450680	-3338010	-1112670
4	21	13	-4093888	-3479805	-614083
4	21	14	-3477781	-3477781	0
4	21	15	-2613447	-2613447	0
4	21	16	-1507770	-1507770	0
4	21	17	-441645	-441645	0
4	21	18	0	0	0
4	21	19	0	0	0
4	21	20	0	0	0
4	21	21	0	0	0
4	21	22	0	0	0
4	21	23	0	0	0
4	22	0	0	0	0
4	22	1	0	0	0
4	22	2	0	0	0
4	22	3	0	0	0
4	22	4	0	0	0
4	22	5	-168740	-168740	0
4	22	6	-994252	-994252	0
4	22	7	-2152982	-2152982	0
4	22	8	-2931089	-2931089	0
4	22	9	-3562184	-2849747	-712437

4	22	10	-3874114	-3292997	-581117
4	22	11	-3412117	-3412117	0
4	22	12	-3905643	-2929232	-976411
4	22	13	-3280837	-3280837	0
4	22	14	-2818671	-2818671	0
4	22	15	-1794920	-1794920	0
4	22	16	-1202389	-1202389	0
4	22	17	-435632	-435632	0
4	22	18	0	0	0
4	22	19	0	0	0
4	22	20	0	0	0
4	22	21	0	0	0
4	22	22	0	0	0
4	22	23	0	0	0
4	23	0	0	0	0
4	23	1	0	0	0
4	23	2	0	0	0
4	23	3	0	0	0
4	23	4	0	0	0
4	23	5	-166502	-166502	0
4	23	6	-583053	-583053	0
4	23	7	-1179876	-1179876	0
4	23	8	-721520	-721520	0
4	23	9	-1527926	-1527926	0
4	23	10	-273934	-273934	0
4	23	11	-620813	-620813	0
4	23	12	-1188552	-1188552	0
4	23	13	-1020492	-1020492	0
4	23	14	-2000795	-2000795	0
4	23	15	-1950041	-1950041	0
4	23	16	-776751	-776751	0
4	23	17	-476115	-476115	0
4	23	18	0	0	0
4	23	19	0	0	0
4	23	20	0	0	0
4	23	21	0	0	0
4	23	22	0	0	0
4	23	23	0	0	0
4	24	0	0	0	0
4	24	1	0	0	0
4	24	2	0	0	0
4	24	3	0	0	0
4	24	4	0	0	0
4	24	5	-168372	-168372	0

4	24	6	-1140813	-1140813	0
4	24	7	-2420657	-2420657	0
4	24	8	-3472997	-3472997	0
4	24	9	-4219876	-3586894	-632981
4	24	10	-4662520	-3496890	-1165630
4	24	11	-4816175	-3852940	-963235
4	24	12	-4706633	-3765307	-941327
4	24	13	-4318414	-3670652	-647762
4	24	14	-3680799	-3680799	0
4	24	15	-2768966	-2768966	0
4	24	16	-1617798	-1617798	0
4	24	17	-476716	-476716	0
4	24	18	0	0	0
4	24	19	0	0	0
4	24	20	0	0	0
4	24	21	0	0	0
4	24	22	0	0	0
4	24	23	0	0	0
4	25	0	0	0	0
4	25	1	0	0	0
4	25	2	0	0	0
4	25	3	0	0	0
4	25	4	0	0	0
4	25	5	-189053	-189053	0
4	25	6	-1098201	-1098201	0
4	25	7	-1850234	-1850234	0
4	25	8	-2789786	-2789786	0
4	25	9	-3723882	-3165300	-558582
4	25	10	-3783462	-3215943	-567519
4	25	11	-4139164	-3311331	-827833
4	25	12	-3999065	-3399205	-599860
4	25	13	-3728783	-3169466	-559318
4	25	14	-3121245	-3121245	0
4	25	15	-2585798	-2585798	0
4	25	16	-1078722	-1078722	0
4	25	17	-396528	-396528	0
4	25	18	0	0	0
4	25	19	0	0	0
4	25	20	0	0	0
4	25	21	0	0	0
4	25	22	0	0	0
4	25	23	0	0	0
4	26	0	0	0	0
4	26	1	0	0	0

4	26	2	0	0	0
4	26	3	0	0	0
4	26	4	0	0	0
4	26	5	-37293	-37293	0
4	26	6	-159501	-159501	0
4	26	7	-437369	-437369	0
4	26	8	-662875	-662875	0
4	26	9	-996487	-996487	0
4	26	10	-1443279	-1443279	0
4	26	11	-1681617	-1681617	0
4	26	12	-1316072	-1316072	0
4	26	13	-1215511	-1215511	0
4	26	14	-826766	-826766	0
4	26	15	-700159	-700159	0
4	26	16	-247475	-247475	0
4	26	17	-301550	-301550	0
4	26	18	0	0	0
4	26	19	0	0	0
4	26	20	0	0	0
4	26	21	0	0	0
4	26	22	0	0	0
4	26	23	0	0	0
4	27	0	0	0	0
4	27	1	0	0	0
4	27	2	0	0	0
4	27	3	0	0	0
4	27	4	0	0	0
4	27	5	-149704	-149704	0
4	27	6	-797644	-797644	0
4	27	7	-628128	-628128	0
4	27	8	-2131557	-2131557	0
4	27	9	-705326	-705326	0
4	27	10	-645321	-645321	0
4	27	11	-1356645	-1356645	0
4	27	12	-3349985	-3349985	0
4	27	13	-2536556	-2536556	0
4	27	14	-1319314	-1319314	0
4	27	15	-955919	-955919	0
4	27	16	-118627	-118627	0
4	27	17	-73479	-73479	0
4	27	18	0	0	0
4	27	19	0	0	0
4	27	20	0	0	0
4	27	21	0	0	0

4	27	22	0	0	0
4	27	23	0	0	0
4	28	0	0	0	0
4	28	1	0	0	0
4	28	2	0	0	0
4	28	3	0	0	0
4	28	4	0	0	0
4	28	5	-204836	-204836	0
4	28	6	-1120051	-1120051	0
4	28	7	-2314942	-2314942	0
4	28	8	-3302421	-3302421	0
4	28	9	-4013629	-3411585	-602044
4	28	10	-4426472	-3319854	-1106618
4	28	11	-4573038	-3201127	-1371911
4	28	12	-4464478	-3571582	-892896
4	28	13	-1219861	-1219861	0
4	28	14	-991549	-991549	0
4	28	15	-731953	-731953	0
4	28	16	-1277390	-1277390	0
4	28	17	-511361	-511361	0
4	28	18	-43045	-43045	0
4	28	19	0	0	0
4	28	20	0	0	0
4	28	21	0	0	0
4	28	22	0	0	0
4	28	23	0	0	0
4	29	0	0	0	0
4	29	1	0	0	0
4	29	2	0	0	0
4	29	3	0	0	0
4	29	4	0	0	0
4	29	5	-21314	-21314	0
4	29	6	-323072	-323072	0
4	29	7	-787581	-787581	0
4	29	8	-662266	-662266	0
4	29	9	-1146279	-1146279	0
4	29	10	-857159	-857159	0
4	29	11	-1087182	-1087182	0
4	29	12	-2507719	-2507719	0
4	29	13	-2754199	-2754199	0
4	29	14	-1647931	-1647931	0
4	29	15	-905726	-905726	0
4	29	16	-353311	-353311	0
4	29	17	-393826	-393826	0

4	29	18	-26642	-26642	0
4	29	19	0	0	0
4	29	20	0	0	0
4	29	21	0	0	0
4	29	22	0	0	0
4	29	23	0	0	0
4	30	0	0	0	0
4	30	1	0	0	0
4	30	2	0	0	0
4	30	3	0	0	0
4	30	4	0	0	0
4	30	5	-106952	-106952	0
4	30	6	-181333	-181333	0
4	30	7	-958516	-958516	0
4	30	8	-1108468	-1108468	0
4	30	9	-1891099	-1891099	0
4	30	10	-2218729	-2218729	0
4	30	11	-2132610	-2132610	0
4	30	12	-1241953	-1241953	0
4	30	13	-1833738	-1833738	0
4	30	14	-983801	-983801	0
4	30	15	-665335	-665335	0
4	30	16	-308002	-308002	0
4	30	17	-299308	-299308	0
4	30	18	-15935	-15935	0
4	30	19	0	0	0
4	30	20	0	0	0
4	30	21	0	0	0
4	30	22	0	0	0
4	30	23	0	0	0
5	1	0	0	0	0
5	1	1	0	0	0
5	1	2	0	0	0
5	1	3	0	0	0
5	1	4	0	0	0
5	1	5	-257042	-257042	0
5	1	6	-1192769	-1192769	0
5	1	7	-2367878	-2367878	0
5	1	8	-3352642	-3352642	0
5	1	9	-4073768	-3259014	-814754
5	1	10	-4487770	-3590216	-897554
5	1	11	-4645021	-3483766	-1161255
5	1	12	-4553306	-3414979	-1138326
5	1	13	-4165164	-3540390	-624775

5	1	14	-3557161	-3557161	0
5	1	15	-2653080	-2653080	0
5	1	16	-1541460	-1541460	0
5	1	17	-566438	-566438	0
5	1	18	-41731	-41731	0
5	1	19	0	0	0
5	1	20	0	0	0
5	1	21	0	0	0
5	1	22	0	0	0
5	1	23	0	0	0
5	2	0	0	0	0
5	2	1	0	0	0
5	2	2	0	0	0
5	2	3	0	0	0
5	2	4	0	0	0
5	2	5	-15847	-15847	0
5	2	6	-230496	-230496	0
5	2	7	-253713	-253713	0
5	2	8	-237364	-237364	0
5	2	9	-277348	-277348	0
5	2	10	-1222565	-1222565	0
5	2	11	-698479	-698479	0
5	2	12	-1238978	-1238978	0
5	2	13	-705229	-705229	0
5	2	14	-812703	-812703	0
5	2	15	-190092	-190092	0
5	2	16	-67651	-67651	0
5	2	17	-109731	-109731	0
5	2	18	0	0	0
5	2	19	0	0	0
5	2	20	0	0	0
5	2	21	0	0	0
5	2	22	0	0	0
5	2	23	0	0	0
5	3	0	0	0	0
5	3	1	0	0	0
5	3	2	0	0	0
5	3	3	0	0	0
5	3	4	0	0	0
5	3	5	-15917	-15917	0
5	3	6	-73958	-73958	0
5	3	7	-194894	-194894	0
5	3	8	-366535	-366535	0
5	3	9	-543109	-543109	0

5	3	10	-296651	-296651	0
5	3	11	-821603	-821603	0
5	3	12	-1592851	-1592851	0
5	3	13	-1264926	-1264926	0
5	3	14	-418524	-418524	0
5	3	15	-224247	-224247	0
5	3	16	-68246	-68246	0
5	3	17	-68596	-68596	0
5	3	18	0	0	0
5	3	19	0	0	0
5	3	20	0	0	0
5	3	21	0	0	0
5	3	22	0	0	0
5	3	23	0	0	0
5	4	0	0	0	0
5	4	1	0	0	0
5	4	2	0	0	0
5	4	3	0	0	0
5	4	4	0	0	0
5	4	5	-31688	-31688	0
5	4	6	-162648	-162648	0
5	4	7	-465289	-465289	0
5	4	8	-1142879	-1142879	0
5	4	9	-1257408	-1257408	0
5	4	10	-769446	-769446	0
5	4	11	-927172	-927172	0
5	4	12	-833479	-833479	0
5	4	13	-1868327	-1868327	0
5	4	14	-1654654	-1654654	0
5	4	15	-658328	-658328	0
5	4	16	-762902	-762902	0
5	4	17	-490076	-490076	0
5	4	18	-70525	-70525	0
5	4	19	0	0	0
5	4	20	0	0	0
5	4	21	0	0	0
5	4	22	0	0	0
5	4	23	0	0	0
5	5	0	0	0	0
5	5	1	0	0	0
5	5	2	0	0	0
5	5	3	0	0	0
5	5	4	0	0	0
5	5	5	-300175	-300175	0

5	5	6	-1202445	-1202445	0
5	5	7	-2354191	-2354191	0
5	5	8	-3289578	-3289578	0
5	5	9	-3955949	-3164759	-791190
5	5	10	-4377882	-3283411	-1094470
5	5	11	-4521222	-3164855	-1356367
5	5	12	-4399203	-3079442	-1319761
5	5	13	-4068205	-3457975	-610231
5	5	14	-3490548	-3490548	0
5	5	15	-2652422	-2652422	0
5	5	16	-1593419	-1593419	0
5	5	17	-551924	-551924	0
5	5	18	-102448	-102448	0
5	5	19	0	0	0
5	5	20	0	0	0
5	5	21	0	0	0
5	5	22	0	0	0
5	5	23	0	0	0
5	6	0	0	0	0
5	6	1	0	0	0
5	6	2	0	0	0
5	6	3	0	0	0
5	6	4	0	0	0
5	6	5	-217307	-217307	0
5	6	6	-976618	-976618	0
5	6	7	-1921927	-1921927	0
5	6	8	-3033416	-3033416	0
5	6	9	-3872254	-3097803	-774451
5	6	10	-4277461	-2994223	-1283238
5	6	11	-4406873	-3305154	-1101718
5	6	12	-4280731	-3424585	-856146
5	6	13	-3956787	-2967590	-989197
5	6	14	-3357645	-3357645	0
5	6	15	-2531374	-2531374	0
5	6	16	-1093735	-1093735	0
5	6	17	-488948	-488948	0
5	6	18	-73145	-73145	0
5	6	19	0	0	0
5	6	20	0	0	0
5	6	21	0	0	0
5	6	22	0	0	0
5	6	23	0	0	0
5	7	0	0	0	0
5	7	1	0	0	0

5	7	2	0	0	0
5	7	3	0	0	0
5	7	4	0	0	0
5	7	5	-283027	-283027	0
5	7	6	-1197957	-1197957	0
5	7	7	-2312406	-2312406	0
5	7	8	-3248035	-3248035	0
5	7	9	-3940002	-3152002	-788000
5	7	10	-4317875	-3238406	-1079469
5	7	11	-4071431	-3460716	-610715
5	7	12	-4322400	-3457920	-864480
5	7	13	-3947960	-3355766	-592194
5	7	14	-3349149	-3349149	0
5	7	15	-2530741	-2530741	0
5	7	16	-1110487	-1110487	0
5	7	17	-505066	-505066	0
5	7	18	-81672	-81672	0
5	7	19	0	0	0
5	7	20	0	0	0
5	7	21	0	0	0
5	7	22	0	0	0
5	7	23	0	0	0
5	8	0	0	0	0
5	8	1	0	0	0
5	8	2	0	0	0
5	8	3	0	0	0
5	8	4	0	0	0
5	8	5	-41306	-41306	0
5	8	6	-351912	-351912	0
5	8	7	-986452	-986452	0
5	8	8	-755965	-755965	0
5	8	9	-1163458	-1163458	0
5	8	10	-1674378	-1674378	0
5	8	11	-2971544	-2971544	0
5	8	12	-2548992	-2548992	0
5	8	13	-1862937	-1862937	0
5	8	14	-2619382	-2619382	0
5	8	15	-2143050	-2143050	0
5	8	16	-1074794	-1074794	0
5	8	17	-475303	-475303	0
5	8	18	-76287	-76287	0
5	8	19	0	0	0
5	8	20	0	0	0
5	8	21	0	0	0

5	8	22	0	0	0
5	8	23	0	0	0
5	9	0	0	0	0
5	9	1	0	0	0
5	9	2	0	0	0
5	9	3	0	0	0
5	9	4	0	0	0
5	9	5	-217993	-217993	0
5	9	6	-502943	-502943	0
5	9	7	-777038	-777038	0
5	9	8	-1000469	-1000469	0
5	9	9	-1541015	-1541015	0
5	9	10	-1533634	-1533634	0
5	9	11	-1089566	-1089566	0
5	9	12	-1215578	-1215578	0
5	9	13	-703453	-703453	0
5	9	14	-593353	-593353	0
5	9	15	-814048	-814048	0
5	9	16	-129879	-129879	0
5	9	17	-57758	-57758	0
5	9	18	-5278	-5278	0
5	9	19	0	0	0
5	9	20	0	0	0
5	9	21	0	0	0
5	9	22	0	0	0
5	9	23	0	0	0
5	10	0	0	0	0
5	10	1	0	0	0
5	10	2	0	0	0
5	10	3	0	0	0
5	10	4	0	0	0
5	10	5	-63357	-63357	0
5	10	6	-672311	-672311	0
5	10	7	-479754	-479754	0
5	10	8	-1215445	-1215445	0
5	10	9	-818346	-818346	0
5	10	10	-1973729	-1973729	0
5	10	11	-3584084	-3584084	0
5	10	12	-3027934	-3027934	0
5	10	13	-3749391	-3749391	0
5	10	14	-2763180	-2763180	0
5	10	15	-2643045	-2643045	0
5	10	16	-1601946	-1601946	0
5	10	17	-486074	-486074	0

5	10	18	-82855	-82855	0
5	10	19	0	0	0
5	10	20	0	0	0
5	10	21	0	0	0
5	10	22	0	0	0
5	10	23	0	0	0
5	11	0	0	0	0
5	11	1	0	0	0
5	11	2	0	0	0
5	11	3	0	0	0
5	11	4	0	0	0
5	11	5	-330808	-330808	0
5	11	6	-1260931	-1260931	0
5	11	7	-2414029	-2414029	0
5	11	8	-3375743	-2869381	-506361
5	11	9	-4057916	-3043437	-1014479
5	11	10	-4472582	-2907178	-1565404
5	11	11	-4618071	-3463553	-1154518
5	11	12	-4500277	-3375208	-1125069
5	11	13	-4166789	-3333431	-833358
5	11	14	-3605151	-3605151	0
5	11	15	-2502841	-2502841	0
5	11	16	-1511954	-1511954	0
5	11	17	-578217	-578217	0
5	11	18	-110025	-110025	0
5	11	19	0	0	0
5	11	20	0	0	0
5	11	21	0	0	0
5	11	22	0	0	0
5	11	23	0	0	0
5	12	0	0	0	0
5	12	1	0	0	0
5	12	2	0	0	0
5	12	3	0	0	0
5	12	4	0	0	0
5	12	5	-231344	-231344	0
5	12	6	-675147	-675147	0
5	12	7	-779236	-779236	0
5	12	8	-1065261	-1065261	0
5	12	9	-1154368	-1154368	0
5	12	10	-1253473	-1253473	0
5	12	11	-1598949	-1598949	0
5	12	12	-1698557	-1698557	0
5	12	13	-1509398	-1509398	0

5	12	14	-1286271	-1286271	0
5	12	15	-1134766	-1134766	0
5	12	16	-1111134	-1111134	0
5	12	17	-542885	-542885	0
5	12	18	-114069	-114069	0
5	12	19	0	0	0
5	12	20	0	0	0
5	12	21	0	0	0
5	12	22	0	0	0
5	12	23	0	0	0
5	13	0	0	0	0
5	13	1	0	0	0
5	13	2	0	0	0
5	13	3	0	0	0
5	13	4	0	0	0
5	13	5	-317028	-317028	0
5	13	6	-866260	-866260	0
5	13	7	-2426306	-2426306	0
5	13	8	-3382611	-3382611	0
5	13	9	-4074371	-3259497	-814874
5	13	10	-4076269	-3057202	-1019067
5	13	11	-4598146	-2988795	-1609351
5	13	12	-4470669	-3129468	-1341201
5	13	13	-3760727	-3760727	0
5	13	14	-3476232	-3476232	0
5	13	15	-2646239	-2646239	0
5	13	16	-1650718	-1650718	0
5	13	17	-622965	-622965	0
5	13	18	-105523	-105523	0
5	13	19	0	0	0
5	13	20	0	0	0
5	13	21	0	0	0
5	13	22	0	0	0
5	13	23	0	0	0
5	14	0	0	0	0
5	14	1	0	0	0
5	14	2	0	0	0
5	14	3	0	0	0
5	14	4	0	0	0
5	14	5	-337303	-337303	0
5	14	6	-1266019	-1266019	0
5	14	7	-2384463	-2384463	0
5	14	8	-3303195	-3303195	0
5	14	9	-3948512	-3158809	-789702

5	14	10	-4348841	-3261631	-1087210
5	14	11	-4489384	-3142569	-1346815
5	14	12	-4403301	-3522641	-880660
5	14	13	-4046639	-3237311	-809328
5	14	14	-3504195	-3504195	0
5	14	15	-2687424	-2687424	0
5	14	16	-1549565	-1549565	0
5	14	17	-561285	-561285	0
5	14	18	-113281	-113281	0
5	14	19	0	0	0
5	14	20	0	0	0
5	14	21	0	0	0
5	14	22	0	0	0
5	14	23	0	0	0
5	15	0	0	0	0
5	15	1	0	0	0
5	15	2	0	0	0
5	15	3	0	0	0
5	15	4	0	0	0
5	15	5	-20947	-20947	0
5	15	6	-480609	-480609	0
5	15	7	-1020662	-1020662	0
5	15	8	-619130	-619130	0
5	15	9	-580607	-580607	0
5	15	10	-1279216	-1279216	0
5	15	11	-1114193	-1114193	0
5	15	12	-866835	-866835	0
5	15	13	-3221321	-3221321	0
5	15	14	-2758912	-2758912	0
5	15	15	-1965367	-1965367	0
5	15	16	-787184	-787184	0
5	15	17	-529811	-529811	0
5	15	18	-116278	-116278	0
5	15	19	0	0	0
5	15	20	0	0	0
5	15	21	0	0	0
5	15	22	0	0	0
5	15	23	0	0	0
5	16	0	0	0	0
5	16	1	0	0	0
5	16	2	0	0	0
5	16	3	0	0	0
5	16	4	0	0	0
5	16	5	-327317	-327317	0

5	16	6	-963834	-963834	0
5	16	7	-951873	-951873	0
5	16	8	-998185	-998185	0
5	16	9	-961148	-961148	0
5	16	10	-1588380	-1588380	0
5	16	11	-746294	-746294	0
5	16	12	-205731	-205731	0
5	16	13	-903201	-903201	0
5	16	14	-201822	-201822	0
5	16	15	-376342	-376342	0
5	16	16	-406902	-406902	0
5	16	17	-113443	-113443	0
5	16	18	-20819	-20819	0
5	16	19	0	0	0
5	16	20	0	0	0
5	16	21	0	0	0
5	16	22	0	0	0
5	16	23	0	0	0
5	17	0	0	0	0
5	17	1	0	0	0
5	17	2	0	0	0
5	17	3	0	0	0
5	17	4	0	0	0
5	17	5	-136498	-136498	0
5	17	6	-694133	-694133	0
5	17	7	-1868273	-1868273	0
5	17	8	-1811379	-1811379	0
5	17	9	-3979229	-3183383	-795846
5	17	10	-4391733	-3074213	-1317520
5	17	11	-4552652	-3414489	-1138163
5	17	12	-4459112	-3567290	-891822
5	17	13	-4132174	-3305739	-826435
5	17	14	-3528400	-3528400	0
5	17	15	-2673332	-2673332	0
5	17	16	-1634513	-1634513	0
5	17	17	-403488	-403488	0
5	17	18	-76717	-76717	0
5	17	19	0	0	0
5	17	20	0	0	0
5	17	21	0	0	0
5	17	22	0	0	0
5	17	23	0	0	0
5	18	0	0	0	0
5	18	1	0	0	0

5	18	2	0	0	0
5	18	3	0	0	0
5	18	4	0	0	0
5	18	5	-349895	-349895	0
5	18	6	-1287908	-1287908	0
5	18	7	-2417726	-2417726	0
5	18	8	-3330344	-3330344	0
5	18	9	-3980518	-3184415	-796104
5	18	10	-4373490	-2842769	-1530722
5	18	11	-4496529	-3147570	-1348959
5	18	12	-3178352	-3178352	0
5	18	13	-700467	-700467	0
5	18	14	-165499	-165499	0
5	18	15	-531003	-531003	0
5	18	16	-314087	-314087	0
5	18	17	-484304	-484304	0
5	18	18	-98006	-98006	0
5	18	19	0	0	0
5	18	20	0	0	0
5	18	21	0	0	0
5	18	22	0	0	0
5	18	23	0	0	0
5	19	0	0	0	0
5	19	1	0	0	0
5	19	2	0	0	0
5	19	3	0	0	0
5	19	4	0	0	0
5	19	5	-355122	-355122	0
5	19	6	-1321880	-1321880	0
5	19	7	-1203507	-1203507	0
5	19	8	-3475335	-2780268	-695067
5	19	9	-4120101	-2884071	-1236030
5	19	10	-3314847	-3314847	0
5	19	11	-2607406	-2607406	0
5	19	12	-1243627	-1243627	0
5	19	13	-2143077	-2143077	0
5	19	14	-2549361	-2549361	0
5	19	15	-2787471	-2787471	0
5	19	16	-1078931	-1078931	0
5	19	17	-609634	-609634	0
5	19	18	-121062	-121062	0
5	19	19	0	0	0
5	19	20	0	0	0
5	19	21	0	0	0

5	19	22	0	0	0
5	19	23	0	0	0
5	20	0	0	0	0
5	20	1	0	0	0
5	20	2	0	0	0
5	20	3	0	0	0
5	20	4	0	0	0
5	20	5	-356362	-356362	0
5	20	6	-1146665	-1146665	0
5	20	7	-1396685	-1396685	0
5	20	8	-2297610	-2297610	0
5	20	9	-4072494	-3257995	-814499
5	20	10	-3796078	-3226667	-569412
5	20	11	-3798420	-3228657	-569763
5	20	12	-1163765	-1163765	0
5	20	13	-714694	-714694	0
5	20	14	-1011559	-1011559	0
5	20	15	-602264	-602264	0
5	20	16	-472190	-472190	0
5	20	17	-481271	-481271	0
5	20	18	-109293	-109293	0
5	20	19	0	0	0
5	20	20	0	0	0
5	20	21	0	0	0
5	20	22	0	0	0
5	20	23	0	0	0
5	21	0	0	0	0
5	21	1	0	0	0
5	21	2	0	0	0
5	21	3	0	0	0
5	21	4	0	0	0
5	21	5	-382492	-382492	0
5	21	6	-1297400	-1297400	0
5	21	7	-2308802	-2308802	0
5	21	8	-3321210	-3321210	0
5	21	9	-3978150	-3381427	-596722
5	21	10	-4385379	-3508304	-877076
5	21	11	-4524751	-3619801	-904950
5	21	12	-4435287	-3548230	-887057
5	21	13	-2269530	-2269530	0
5	21	14	-1323344	-1323344	0
5	21	15	-2308489	-2308489	0
5	21	16	-104225	-104225	0
5	21	17	-87202	-87202	0

5	21	18	-15548	-15548	0
5	21	19	0	0	0
5	21	20	0	0	0
5	21	21	0	0	0
5	21	22	0	0	0
5	21	23	0	0	0
5	22	0	0	0	0
5	22	1	0	0	0
5	22	2	0	0	0
5	22	3	0	0	0
5	22	4	0	0	0
5	22	5	-332221	-332221	0
5	22	6	-1115049	-1115049	0
5	22	7	-797000	-797000	0
5	22	8	-1503370	-1503370	0
5	22	9	-2204753	-2204753	0
5	22	10	-2958239	-2958239	0
5	22	11	-2268196	-2268196	0
5	22	12	-471153	-471153	0
5	22	13	-1681725	-1681725	0
5	22	14	-1725967	-1725967	0
5	22	15	-1112605	-1112605	0
5	22	16	-696228	-696228	0
5	22	17	-686155	-686155	0
5	22	18	-130887	-130887	0
5	22	19	0	0	0
5	22	20	0	0	0
5	22	21	0	0	0
5	22	22	0	0	0
5	22	23	0	0	0
5	23	0	0	0	0
5	23	1	0	0	0
5	23	2	0	0	0
5	23	3	0	0	0
5	23	4	-38256	-38256	0
5	23	5	-335121	-335121	0
5	23	6	-1312668	-1312668	0
5	23	7	-2422332	-2422332	0
5	23	8	-3322285	-3322285	0
5	23	9	-3981206	-3184965	-796241
5	23	10	-4377207	-3282905	-1094302
5	23	11	-4520489	-3390367	-1130122
5	23	12	-1791418	-1791418	0
5	23	13	-4192130	-3563311	-628820

5	23	14	-3539554	-3539554	0
5	23	15	-2738304	-2738304	0
5	23	16	-83184	-83184	0
5	23	17	-650241	-650241	0
5	23	18	-116759	-116759	0
5	23	19	0	0	0
5	23	20	0	0	0
5	23	21	0	0	0
5	23	22	0	0	0
5	23	23	0	0	0
5	24	0	0	0	0
5	24	1	0	0	0
5	24	2	0	0	0
5	24	3	0	0	0
5	24	4	-47330	-47330	0
5	24	5	-331757	-331757	0
5	24	6	-1296854	-1296854	0
5	24	7	-2383634	-2383634	0
5	24	8	-3286923	-3286923	0
5	24	9	-3444830	-3444830	0
5	24	10	-2488355	-2488355	0
5	24	11	-3604854	-3604854	0
5	24	12	-3722962	-3722962	0
5	24	13	-3101186	-3101186	0
5	24	14	-1129584	-1129584	0
5	24	15	-1728353	-1728353	0
5	24	16	-1729986	-1729986	0
5	24	17	-133849	-133849	0
5	24	18	-30786	-30786	0
5	24	19	0	0	0
5	24	20	0	0	0
5	24	21	0	0	0
5	24	22	0	0	0
5	24	23	0	0	0
5	25	0	0	0	0
5	25	1	0	0	0
5	25	2	0	0	0
5	25	3	0	0	0
5	25	4	-46714	-46714	0
5	25	5	-356099	-356099	0
5	25	6	-1305951	-1305951	0
5	25	7	-2412611	-2412611	0
5	25	8	-3306294	-3306294	0
5	25	9	-3944569	-3155655	-788914

5	25	10	-4346879	-3042815	-1304064
5	25	11	-4483405	-3362554	-1120851
5	25	12	-4390355	-3292766	-1097589
5	25	13	-4071887	-3461104	-610783
5	25	14	-3502466	-3502466	0
5	25	15	-2721381	-2721381	0
5	25	16	-1730159	-1730159	0
5	25	17	-659535	-659535	0
5	25	18	-129852	-129852	0
5	25	19	0	0	0
5	25	20	0	0	0
5	25	21	0	0	0
5	25	22	0	0	0
5	25	23	0	0	0
5	26	0	0	0	0
5	26	1	0	0	0
5	26	2	0	0	0
5	26	3	0	0	0
5	26	4	-46289	-46289	0
5	26	5	-340797	-340797	0
5	26	6	-1134626	-1134626	0
5	26	7	-2173043	-2173043	0
5	26	8	-3299621	-3299621	0
5	26	9	-3913091	-3326127	-586964
5	26	10	-4300388	-3440310	-860078
5	26	11	-4445857	-3112100	-1333757
5	26	12	-4349842	-3262382	-1087461
5	26	13	-4048789	-3441471	-607318
5	26	14	-3477870	-3477870	0
5	26	15	-2249522	-2249522	0
5	26	16	-1665381	-1665381	0
5	26	17	-575743	-575743	0
5	26	18	-159597	-159597	0
5	26	19	0	0	0
5	26	20	0	0	0
5	26	21	0	0	0
5	26	22	0	0	0
5	26	23	0	0	0
5	27	0	0	0	0
5	27	1	0	0	0
5	27	2	0	0	0
5	27	3	0	0	0
5	27	4	-15418	-15418	0
5	27	5	-137909	-137909	0

5	27	6	-304622	-304622	0
5	27	7	-692094	-692094	0
5	27	8	-2187915	-2187915	0
5	27	9	-2841341	-2841341	0
5	27	10	-4065891	-3456007	-609884
5	27	11	-4187483	-3559361	-628122
5	27	12	-4125088	-3506325	-618763
5	27	13	-3319885	-3319885	0
5	27	14	-3270080	-3270080	0
5	27	15	-2462872	-2462872	0
5	27	16	-529858	-529858	0
5	27	17	-422943	-422943	0
5	27	18	-95340	-95340	0
5	27	19	0	0	0
5	27	20	0	0	0
5	27	21	0	0	0
5	27	22	0	0	0
5	27	23	0	0	0
5	28	0	0	0	0
5	28	1	0	0	0
5	28	2	0	0	0
5	28	3	0	0	0
5	28	4	-20929	-20929	0
5	28	5	-348603	-348603	0
5	28	6	-1377617	-1377617	0
5	28	7	-2513136	-2513136	0
5	28	8	-3443792	-3443792	0
5	28	9	-4112254	-3289803	-822451
5	28	10	-4485575	-3588460	-897115
5	28	11	-4621983	-3697586	-924397
5	28	12	-4515173	-3612138	-903035
5	28	13	-4175743	-4175743	0
5	28	14	-3604783	-3604783	0
5	28	15	-2796218	-2796218	0
5	28	16	-1782691	-1782691	0
5	28	17	-696054	-696054	0
5	28	18	-144363	-144363	0
5	28	19	0	0	0
5	28	20	0	0	0
5	28	21	0	0	0
5	28	22	0	0	0
5	28	23	0	0	0
5	29	0	0	0	0
5	29	1	0	0	0

5	29	2	0	0	0
5	29	3	0	0	0
5	29	4	-51231	-51231	0
5	29	5	-362281	-362281	0
5	29	6	-1344342	-1344342	0
5	29	7	-2431803	-2431803	0
5	29	8	-3339297	-3339297	0
5	29	9	-3990109	-3192088	-798022
5	29	10	-4371017	-3496814	-874203
5	29	11	-4500314	-3375235	-1125078
5	29	12	-4393423	-3734410	-659013
5	29	13	-4050639	-4050639	0
5	29	14	-3504360	-3504360	0
5	29	15	-2720328	-2720328	0
5	29	16	-1742624	-1742624	0
5	29	17	-687532	-687532	0
5	29	18	-146805	-146805	0
5	29	19	0	0	0
5	29	20	0	0	0
5	29	21	0	0	0
5	29	22	0	0	0
5	29	23	0	0	0
5	30	0	0	0	0
5	30	1	0	0	0
5	30	2	0	0	0
5	30	3	0	0	0
5	30	4	-50480	-50480	0
5	30	5	-370861	-370861	0
5	30	6	-1298115	-1298115	0
5	30	7	-2364900	-2364900	0
5	30	8	-3238301	-3238301	0
5	30	9	-3847060	-3270001	-577059
5	30	10	-4215550	-3583217	-632332
5	30	11	-4342371	-3473897	-868474
5	30	12	-4254319	-3828887	-425432
5	30	13	-3983488	-3983488	0
5	30	14	-2947159	-2947159	0
5	30	15	-1953442	-1953442	0
5	30	16	-1513390	-1513390	0
5	30	17	-361867	-361867	0
5	30	18	-168811	-168811	0
5	30	19	0	0	0
5	30	20	0	0	0
5	30	21	0	0	0

5	30	22	0	0	0
5	30	23	0	0	0
5	31	0	0	0	0
5	31	1	0	0	0
5	31	2	0	0	0
5	31	3	0	0	0
5	31	4	-41317	-41317	0
5	31	5	-148738	-148738	0
5	31	6	-937987	-937987	0
5	31	7	-2209101	-2209101	0
5	31	8	-2708444	-2708444	0
5	31	9	-2107419	-2107419	0
5	31	10	-951174	-951174	0
5	31	11	-719446	-719446	0
5	31	12	-1314061	-1314061	0
5	31	13	-899257	-899257	0
5	31	14	-1087549	-1087549	0
5	31	15	-1509559	-1509559	0
5	31	16	-1563960	-1563960	0
5	31	17	-207477	-207477	0
5	31	18	-121827	-121827	0
5	31	19	0	0	0
5	31	20	0	0	0
5	31	21	0	0	0
5	31	22	0	0	0
5	31	23	0	0	0
6	1	0	0	0	0
6	1	1	0	0	0
6	1	2	0	0	0
6	1	3	0	0	0
6	1	4	-46697	-46697	0
6	1	5	-380588	-380588	0
6	1	6	-1024716	-1024716	0
6	1	7	-1865643	-1865643	0
6	1	8	-2717596	-2717596	0
6	1	9	-3265155	-3265155	0
6	1	10	-3917037	-3133630	-783407
6	1	11	-4057906	-3449220	-608686
6	1	12	-3973761	-3377697	-596064
6	1	13	-3687014	-3687014	0
6	1	14	-3182093	-3182093	0
6	1	15	-1847693	-1847693	0
6	1	16	-1548073	-1548073	0
6	1	17	-697372	-697372	0

6	1	18	-164084	-164084	0
6	1	19	0	0	0
6	1	20	0	0	0
6	1	21	0	0	0
6	1	22	0	0	0
6	1	23	0	0	0
6	2	0	0	0	0
6	2	1	0	0	0
6	2	2	0	0	0
6	2	3	0	0	0
6	2	4	-55545	-55545	0
6	2	5	-397654	-397654	0
6	2	6	-819088	-819088	0
6	2	7	-1783942	-1783942	0
6	2	8	-2999733	-2999733	0
6	2	9	-3561028	-3561028	0
6	2	10	-3899591	-3314653	-584939
6	2	11	-4029737	-3223790	-805947
6	2	12	-3986080	-3388168	-597912
6	2	13	-3710989	-3710989	0
6	2	14	-3207137	-3207137	0
6	2	15	-2487039	-2487039	0
6	2	16	-1406870	-1406870	0
6	2	17	-536949	-536949	0
6	2	18	-4964	-4964	0
6	2	19	0	0	0
6	2	20	0	0	0
6	2	21	0	0	0
6	2	22	0	0	0
6	2	23	0	0	0
6	3	0	0	0	0
6	3	1	0	0	0
6	3	2	0	0	0
6	3	3	0	0	0
6	3	4	-62674	-62674	0
6	3	5	-354971	-354971	0
6	3	6	-1326239	-1326239	0
6	3	7	-2412644	-2412644	0
6	3	8	-3308860	-3308860	0
6	3	9	-3973897	-2781728	-1192169
6	3	10	-4369586	-3058710	-1310876
6	3	11	-4509716	-3382287	-1127429
6	3	12	-4439525	-3551620	-887905
6	3	13	-4106270	-3490330	-615941

6	3	14	-3556674	-3556674	0
6	3	15	-2770668	-2770668	0
6	3	16	-1764647	-1764647	0
6	3	17	-715258	-715258	0
6	3	18	-147271	-147271	0
6	3	19	0	0	0
6	3	20	0	0	0
6	3	21	0	0	0
6	3	22	0	0	0
6	3	23	0	0	0
6	4	0	0	0	0
6	4	1	0	0	0
6	4	2	0	0	0
6	4	3	0	0	0
6	4	4	-58835	-58835	0
6	4	5	-377708	-377708	0
6	4	6	-1308193	-1308193	0
6	4	7	-2351468	-2351468	0
6	4	8	-3227333	-3227333	0
6	4	9	-3857477	-3085982	-771495
6	4	10	-4250835	-3400668	-850167
6	4	11	-4403629	-3522903	-880726
6	4	12	-4330274	-3464219	-866055
6	4	13	-4033959	-3428866	-605094
6	4	14	-3486055	-3486055	0
6	4	15	-2718285	-2718285	0
6	4	16	-1737779	-1737779	0
6	4	17	-747293	-747293	0
6	4	18	-180916	-180916	0
6	4	19	0	0	0
6	4	20	0	0	0
6	4	21	0	0	0
6	4	22	0	0	0
6	4	23	0	0	0
6	5	0	0	0	0
6	5	1	0	0	0
6	5	2	0	0	0
6	5	3	0	0	0
6	5	4	-51884	-51884	0
6	5	5	-108280	-108280	0
6	5	6	-959743	-959743	0
6	5	7	-1913119	-1913119	0
6	5	8	-2877040	-2877040	0
6	5	9	-3819800	-3246830	-572970

6	5	10	-3307205	-3307205	0
6	5	11	-3718569	-3718569	0
6	5	12	-3487246	-3487246	0
6	5	13	-3248071	-3248071	0
6	5	14	-3164184	-3164184	0
6	5	15	-1586929	-1586929	0
6	5	16	-1178032	-1178032	0
6	5	17	-604156	-604156	0
6	5	18	-184417	-184417	0
6	5	19	0	0	0
6	5	20	0	0	0
6	5	21	0	0	0
6	5	22	0	0	0
6	5	23	0	0	0
6	6	0	0	0	0
6	6	1	0	0	0
6	6	2	0	0	0
6	6	3	0	0	0
6	6	4	-52123	-52123	0
6	6	5	-170722	-170722	0
6	6	6	-549741	-549741	0
6	6	7	-1014393	-1014393	0
6	6	8	-1028230	-1028230	0
6	6	9	-1225804	-1225804	0
6	6	10	-1445427	-1445427	0
6	6	11	-1948596	-1948596	0
6	6	12	-1292797	-1292797	0
6	6	13	-1256578	-1256578	0
6	6	14	-962999	-962999	0
6	6	15	-1063699	-1063699	0
6	6	16	-508158	-508158	0
6	6	17	-564730	-564730	0
6	6	18	-195335	-195335	0
6	6	19	0	0	0
6	6	20	0	0	0
6	6	21	0	0	0
6	6	22	0	0	0
6	6	23	0	0	0
6	7	0	0	0	0
6	7	1	0	0	0
6	7	2	0	0	0
6	7	3	0	0	0
6	7	4	0	0	0
6	7	5	-122391	-122391	0

6	7	6	-237555	-237555	0
6	7	7	-678330	-678330	0
6	7	8	-1413410	-1413410	0
6	7	9	-3383355	-3383355	0
6	7	10	-4397962	-3298471	-1099490
6	7	11	-4536181	-3628945	-907236
6	7	12	-3212534	-3212534	0
6	7	13	-4131244	-3718119	-413124
6	7	14	-3564060	-3564060	0
6	7	15	-2776132	-2776132	0
6	7	16	-1782521	-1782521	0
6	7	17	-749324	-749324	0
6	7	18	-167317	-167317	0
6	7	19	0	0	0
6	7	20	0	0	0
6	7	21	0	0	0
6	7	22	0	0	0
6	7	23	0	0	0
6	8	0	0	0	0
6	8	1	0	0	0
6	8	2	0	0	0
6	8	3	0	0	0
6	8	4	-68123	-68123	0
6	8	5	-396055	-396055	0
6	8	6	-1308640	-1308640	0
6	8	7	-2165911	-2165911	0
6	8	8	-2393887	-2393887	0
6	8	9	-3790399	-3790399	0
6	8	10	-4147304	-3732574	-414730
6	8	11	-3006814	-3006814	0
6	8	12	-3337948	-3337948	0
6	8	13	-3249564	-3249564	0
6	8	14	-2480327	-2480327	0
6	8	15	-1789300	-1789300	0
6	8	16	-1211330	-1211330	0
6	8	17	-782820	-782820	0
6	8	18	-209009	-209009	0
6	8	19	0	0	0
6	8	20	0	0	0
6	8	21	0	0	0
6	8	22	0	0	0
6	8	23	0	0	0
6	9	0	0	0	0
6	9	1	0	0	0

6	9	2	0	0	0
6	9	3	0	0	0
6	9	4	-56300	-56300	0
6	9	5	-385518	-385518	0
6	9	6	-1077082	-1077082	0
6	9	7	-1817434	-1817434	0
6	9	8	-2753955	-2753955	0
6	9	9	-1942077	-1942077	0
6	9	10	-1513134	-1513134	0
6	9	11	-3574556	-3574556	0
6	9	12	-2831928	-2831928	0
6	9	13	-2349725	-2349725	0
6	9	14	-2144000	-2144000	0
6	9	15	-1469046	-1469046	0
6	9	16	-1129362	-1129362	0
6	9	17	-606398	-606398	0
6	9	18	-195020	-195020	0
6	9	19	0	0	0
6	9	20	0	0	0
6	9	21	0	0	0
6	9	22	0	0	0
6	9	23	0	0	0
6	10	0	0	0	0
6	10	1	0	0	0
6	10	2	0	0	0
6	10	3	0	0	0
6	10	4	-54771	-54771	0
6	10	5	-430287	-430287	0
6	10	6	-1220438	-1220438	0
6	10	7	-2215903	-2215903	0
6	10	8	-3071366	-3071366	0
6	10	9	-3692062	-3692062	0
6	10	10	-4048484	-4048484	0
6	10	11	-4184612	-4184612	0
6	10	12	-4105030	-4105030	0
6	10	13	-3799938	-3799938	0
6	10	14	-3286979	-3286979	0
6	10	15	-2564622	-2564622	0
6	10	16	-1667639	-1667639	0
6	10	17	-747753	-747753	0
6	10	18	-202450	-202450	0
6	10	19	0	0	0
6	10	20	0	0	0
6	10	21	0	0	0

6	10	22	0	0	0
6	10	23	0	0	0
6	11	0	0	0	0
6	11	1	0	0	0
6	11	2	0	0	0
6	11	3	0	0	0
6	11	4	-64351	-64351	0
6	11	5	-450375	-450375	0
6	11	6	-1232209	-1232209	0
6	11	7	-2165399	-2165399	0
6	11	8	-2975849	-2975849	0
6	11	9	-3582175	-3582175	0
6	11	10	-3611458	-3611458	0
6	11	11	-3441242	-3441242	0
6	11	12	-3702895	-3702895	0
6	11	13	-1571173	-1571173	0
6	11	14	-1079204	-1079204	0
6	11	15	-558965	-558965	0
6	11	16	-1092350	-1092350	0
6	11	17	-393700	-393700	0
6	11	18	-100805	-100805	0
6	11	19	0	0	0
6	11	20	0	0	0
6	11	21	0	0	0
6	11	22	0	0	0
6	11	23	0	0	0
6	12	0	0	0	0
6	12	1	0	0	0
6	12	2	0	0	0
6	12	3	0	0	0
6	12	4	-20838	-20838	0
6	12	5	-263629	-263629	0
6	12	6	-211375	-211375	0
6	12	7	-674054	-674054	0
6	12	8	-1151091	-1151091	0
6	12	9	-900424	-900424	0
6	12	10	-1657468	-1657468	0
6	12	11	-2431911	-2431911	0
6	12	12	-1096663	-1096663	0
6	12	13	-1790429	-1790429	0
6	12	14	-1071724	-1071724	0
6	12	15	-1000962	-1000962	0
6	12	16	-1210655	-1210655	0
6	12	17	-391837	-391837	0

6	12	18	-221107	-221107	0
6	12	19	0	0	0
6	12	20	0	0	0
6	12	21	0	0	0
6	12	22	0	0	0
6	12	23	0	0	0
6	13	0	0	0	0
6	13	1	0	0	0
6	13	2	0	0	0
6	13	3	0	0	0
6	13	4	-73641	-73641	0
6	13	5	-400381	-400381	0
6	13	6	-993309	-993309	0
6	13	7	-2057201	-2057201	0
6	13	8	-2035740	-2035740	0
6	13	9	-3898060	-3313351	-584709
6	13	10	-4240252	-3392201	-848050
6	13	11	-3888218	-3304985	-583233
6	13	12	-3700942	-3700942	0
6	13	13	-2954170	-2954170	0
6	13	14	-2574779	-2574779	0
6	13	15	-1154693	-1154693	0
6	13	16	-888943	-888943	0
6	13	17	-601055	-601055	0
6	13	18	-190554	-190554	0
6	13	19	0	0	0
6	13	20	0	0	0
6	13	21	0	0	0
6	13	22	0	0	0
6	13	23	0	0	0
6	14	0	0	0	0
6	14	1	0	0	0
6	14	2	0	0	0
6	14	3	0	0	0
6	14	4	-15630	-15630	0
6	14	5	-124327	-124327	0
6	14	6	-678810	-678810	0
6	14	7	-1169223	-1169223	0
6	14	8	-1277116	-1277116	0
6	14	9	-2199329	-2199329	0
6	14	10	-2599197	-2599197	0
6	14	11	-2280163	-2280163	0
6	14	12	-1715240	-1715240	0
6	14	13	-2085460	-2085460	0

6	14	14	-2661009	-2661009	0
6	14	15	-2625644	-2625644	0
6	14	16	-1058511	-1058511	0
6	14	17	-635162	-635162	0
6	14	18	-223826	-223826	0
6	14	19	0	0	0
6	14	20	0	0	0
6	14	21	0	0	0
6	14	22	0	0	0
6	14	23	0	0	0
6	15	0	0	0	0
6	15	1	0	0	0
6	15	2	0	0	0
6	15	3	0	0	0
6	15	4	-47217	-47217	0
6	15	5	-199810	-199810	0
6	15	6	-421599	-421599	0
6	15	7	-652168	-652168	0
6	15	8	-957905	-957905	0
6	15	9	-1146763	-1146763	0
6	15	10	-964155	-964155	0
6	15	11	-907448	-907448	0
6	15	12	-1052586	-1052586	0
6	15	13	-1559405	-1559405	0
6	15	14	-1499779	-1499779	0
6	15	15	-838833	-838833	0
6	15	16	-548677	-548677	0
6	15	17	-798566	-798566	0
6	15	18	-222793	-222793	0
6	15	19	0	0	0
6	15	20	0	0	0
6	15	21	0	0	0
6	15	22	0	0	0
6	15	23	0	0	0
6	16	0	0	0	0
6	16	1	0	0	0
6	16	2	0	0	0
6	16	3	0	0	0
6	16	4	-56035	-56035	0
6	16	5	-351650	-351650	0
6	16	6	-1001204	-1001204	0
6	16	7	-1425466	-1425466	0
6	16	8	-1669550	-1669550	0
6	16	9	-3622397	-3260157	-362240

6	16	10	-3953560	-3360526	-593034
6	16	11	-4102902	-3077176	-1025725
6	16	12	-4060209	-3248167	-812042
6	16	13	-3761736	-3761736	0
6	16	14	-3269202	-3269202	0
6	16	15	-2558136	-2558136	0
6	16	16	-1674703	-1674703	0
6	16	17	-757221	-757221	0
6	16	18	-207536	-207536	0
6	16	19	0	0	0
6	16	20	0	0	0
6	16	21	0	0	0
6	16	22	0	0	0
6	16	23	0	0	0
6	17	0	0	0	0
6	17	1	0	0	0
6	17	2	0	0	0
6	17	3	0	0	0
6	17	4	-63559	-63559	0
6	17	5	-363328	-363328	0
6	17	6	-1176924	-1176924	0
6	17	7	-2138142	-2138142	0
6	17	8	-2967507	-2967507	0
6	17	9	-3572934	-3572934	0
6	17	10	-3689980	-3689980	0
6	17	11	-3746901	-3746901	0
6	17	12	-3426309	-3426309	0
6	17	13	-3702999	-3702999	0
6	17	14	-3202311	-3202311	0
6	17	15	-2346244	-2346244	0
6	17	16	-346021	-346021	0
6	17	17	-657435	-657435	0
6	17	18	-227375	-227375	0
6	17	19	0	0	0
6	17	20	0	0	0
6	17	21	0	0	0
6	17	22	0	0	0
6	17	23	0	0	0
6	18	0	0	0	0
6	18	1	0	0	0
6	18	2	0	0	0
6	18	3	0	0	0
6	18	4	-61971	-61971	0
6	18	5	-348008	-348008	0

6	18	6	-1210240	-1210240	0
6	18	7	-1777116	-1777116	0
6	18	8	-2349671	-2349671	0
6	18	9	-2704642	-2704642	0
6	18	10	-1917467	-1917467	0
6	18	11	-1315866	-1315866	0
6	18	12	-1486410	-1486410	0
6	18	13	-1188662	-1188662	0
6	18	14	-749357	-749357	0
6	18	15	-605297	-605297	0
6	18	16	-784028	-784028	0
6	18	17	-148531	-148531	0
6	18	18	-55386	-55386	0
6	18	19	0	0	0
6	18	20	0	0	0
6	18	21	0	0	0
6	18	22	0	0	0
6	18	23	0	0	0
6	19	0	0	0	0
6	19	1	0	0	0
6	19	2	0	0	0
6	19	3	0	0	0
6	19	4	-64649	-64649	0
6	19	5	-369271	-369271	0
6	19	6	-748236	-748236	0
6	19	7	-1013590	-1013590	0
6	19	8	-1887096	-1887096	0
6	19	9	-2709286	-2709286	0
6	19	10	-2719879	-2719879	0
6	19	11	-1939164	-1939164	0
6	19	12	-2510569	-2510569	0
6	19	13	-2833596	-2833596	0
6	19	14	-2055561	-2055561	0
6	19	15	-1748737	-1748737	0
6	19	16	-1063145	-1063145	0
6	19	17	-667638	-667638	0
6	19	18	-215084	-215084	0
6	19	19	0	0	0
6	19	20	0	0	0
6	19	21	0	0	0
6	19	22	0	0	0
6	19	23	0	0	0
6	20	0	0	0	0
6	20	1	0	0	0

6	20	2	0	0	0
6	20	3	0	0	0
6	20	4	-62560	-62560	0
6	20	5	-365657	-365657	0
6	20	6	-1250564	-1250564	0
6	20	7	-2264901	-2264901	0
6	20	8	-3138594	-3138594	0
6	20	9	-3764568	-3199883	-564685
6	20	10	-4192399	-3353919	-838480
6	20	11	-4357236	-3267927	-1089309
6	20	12	-4268879	-3628548	-640332
6	20	13	-3964150	-3171320	-792830
6	20	14	-3449717	-3449717	0
6	20	15	-2663512	-2663512	0
6	20	16	-1767273	-1767273	0
6	20	17	-776028	-776028	0
6	20	18	-171561	-171561	0
6	20	19	0	0	0
6	20	20	0	0	0
6	20	21	0	0	0
6	20	22	0	0	0
6	20	23	0	0	0
6	21	0	0	0	0
6	21	1	0	0	0
6	21	2	0	0	0
6	21	3	0	0	0
6	21	4	-61406	-61406	0
6	21	5	-371924	-371924	0
6	21	6	-1115496	-1115496	0
6	21	7	-1780349	-1780349	0
6	21	8	-2464292	-2464292	0
6	21	9	-3171663	-3171663	0
6	21	10	-3643612	-3643612	0
6	21	11	-4219273	-3586382	-632891
6	21	12	-3895597	-3895597	0
6	21	13	-3503382	-3503382	0
6	21	14	-3150725	-3150725	0
6	21	15	-2571649	-2571649	0
6	21	16	-1682047	-1682047	0
6	21	17	-726028	-726028	0
6	21	18	-203091	-203091	0
6	21	19	0	0	0
6	21	20	0	0	0
6	21	21	0	0	0

6	21	22	0	0	0
6	21	23	0	0	0
6	22	0	0	0	0
6	22	1	0	0	0
6	22	2	0	0	0
6	22	3	0	0	0
6	22	4	-40177	-40177	0
6	22	5	-60221	-60221	0
6	22	6	-715786	-715786	0
6	22	7	-836697	-836697	0
6	22	8	-1069363	-1069363	0
6	22	9	-1385420	-1385420	0
6	22	10	-2235392	-2235392	0
6	22	11	-3766958	-3766958	0
6	22	12	-2438426	-2438426	0
6	22	13	-3434931	-3434931	0
6	22	14	-2484421	-2484421	0
6	22	15	-2172729	-2172729	0
6	22	16	-1763769	-1763769	0
6	22	17	-751000	-751000	0
6	22	18	-209686	-209686	0
6	22	19	0	0	0
6	22	20	0	0	0
6	22	21	0	0	0
6	22	22	0	0	0
6	22	23	0	0	0
6	23	0	0	0	0
6	23	1	0	0	0
6	23	2	0	0	0
6	23	3	0	0	0
6	23	4	-57487	-57487	0
6	23	5	-341062	-341062	0
6	23	6	-1158396	-1158396	0
6	23	7	-2118917	-2118917	0
6	23	8	-3127553	-3127553	0
6	23	9	-3742141	-3180820	-561321
6	23	10	-4110144	-3493622	-616522
6	23	11	-4246665	-3609665	-637000
6	23	12	-4188039	-3559833	-628206
6	23	13	-3925304	-3532774	-392530
6	23	14	-3411092	-3411092	0
6	23	15	-2703244	-2703244	0
6	23	16	-1776498	-1776498	0
6	23	17	-783653	-783653	0

6	23	18	-171861	-171861	0
6	23	19	0	0	0
6	23	20	0	0	0
6	23	21	0	0	0
6	23	22	0	0	0
6	23	23	0	0	0
6	24	0	0	0	0
6	24	1	0	0	0
6	24	2	0	0	0
6	24	3	0	0	0
6	24	4	-57798	-57798	0
6	24	5	-333716	-333716	0
6	24	6	-1219379	-1219379	0
6	24	7	-2264030	-2264030	0
6	24	8	-3133719	-3133719	0
6	24	9	-3763614	-3199072	-564542
6	24	10	-4145667	-3523817	-621850
6	24	11	-3761930	-3761930	0
6	24	12	-3645961	-3645961	0
6	24	13	-2621645	-2621645	0
6	24	14	-3260342	-3260342	0
6	24	15	-2431586	-2431586	0
6	24	16	-1578261	-1578261	0
6	24	17	-806668	-806668	0
6	24	18	-202644	-202644	0
6	24	19	0	0	0
6	24	20	0	0	0
6	24	21	0	0	0
6	24	22	0	0	0
6	24	23	0	0	0
6	25	0	0	0	0
6	25	1	0	0	0
6	25	2	0	0	0
6	25	3	0	0	0
6	25	4	-30271	-30271	0
6	25	5	-419593	-419593	0
6	25	6	-1178951	-1178951	0
6	25	7	-2101066	-2101066	0
6	25	8	-2460094	-2460094	0
6	25	9	-2824519	-2824519	0
6	25	10	-3274738	-3274738	0
6	25	11	-3836151	-3836151	0
6	25	12	-3983193	-3983193	0
6	25	13	-3768587	-3768587	0

6	25	14	-3297239	-3297239	0
6	25	15	-2599214	-2599214	0
6	25	16	-1719508	-1719508	0
6	25	17	-802603	-802603	0
6	25	18	-222758	-222758	0
6	25	19	0	0	0
6	25	20	0	0	0
6	25	21	0	0	0
6	25	22	0	0	0
6	25	23	0	0	0
6	26	0	0	0	0
6	26	1	0	0	0
6	26	2	0	0	0
6	26	3	0	0	0
6	26	4	-40174	-40174	0
6	26	5	-355832	-355832	0
6	26	6	-1144121	-1144121	0
6	26	7	-1572949	-1572949	0
6	26	8	-2126146	-2126146	0
6	26	9	-1652983	-1652983	0
6	26	10	-1458546	-1458546	0
6	26	11	-1540894	-1540894	0
6	26	12	-2402416	-2402416	0
6	26	13	-2746086	-2746086	0
6	26	14	-3108976	-3108976	0
6	26	15	-2437258	-2437258	0
6	26	16	-1641071	-1641071	0
6	26	17	-805759	-805759	0
6	26	18	-225202	-225202	0
6	26	19	0	0	0
6	26	20	0	0	0
6	26	21	0	0	0
6	26	22	0	0	0
6	26	23	0	0	0
6	27	0	0	0	0
6	27	1	0	0	0
6	27	2	0	0	0
6	27	3	0	0	0
6	27	4	-9945	-9945	0
6	27	5	-375163	-375163	0
6	27	6	-1142021	-1142021	0
6	27	7	-2045605	-2045605	0
6	27	8	-2685709	-2685709	0
6	27	9	-3278377	-3278377	0

6	27	10	-3836583	-3836583	0
6	27	11	-3092596	-3092596	0
6	27	12	-3424865	-3424865	0
6	27	13	-3723658	-3723658	0
6	27	14	-2974769	-2974769	0
6	27	15	-456535	-456535	0
6	27	16	-479740	-479740	0
6	27	17	-510602	-510602	0
6	27	18	-103175	-103175	0
6	27	19	0	0	0
6	27	20	0	0	0
6	27	21	0	0	0
6	27	22	0	0	0
6	27	23	0	0	0
6	28	0	0	0	0
6	28	1	0	0	0
6	28	2	0	0	0
6	28	3	0	0	0
6	28	4	-35481	-35481	0
6	28	5	-343759	-343759	0
6	28	6	-744308	-744308	0
6	28	7	-2137253	-2137253	0
6	28	8	-2625772	-2625772	0
6	28	9	-3340115	-3340115	0
6	28	10	-3812113	-3812113	0
6	28	11	-4261627	-3622383	-639244
6	28	12	-4195772	-4195772	0
6	28	13	-3563044	-3563044	0
6	28	14	-3427590	-3427590	0
6	28	15	-2247506	-2247506	0
6	28	16	-1780138	-1780138	0
6	28	17	-792569	-792569	0
6	28	18	-180952	-180952	0
6	28	19	0	0	0
6	28	20	0	0	0
6	28	21	0	0	0
6	28	22	0	0	0
6	28	23	0	0	0
6	29	0	0	0	0
6	29	1	0	0	0
6	29	2	0	0	0
6	29	3	0	0	0
6	29	4	-20273	-20273	0
6	29	5	-251013	-251013	0

6	29	6	-573335	-573335	0
6	29	7	-1740365	-1740365	0
6	29	8	-2536509	-2536509	0
6	29	9	-1910721	-1910721	0
6	29	10	-2193249	-2193249	0
6	29	11	-2219019	-2219019	0
6	29	12	-2312810	-2312810	0
6	29	13	-2331528	-2331528	0
6	29	14	-2677361	-2677361	0
6	29	15	-2621620	-2621620	0
6	29	16	-1712623	-1712623	0
6	29	17	-828602	-828602	0
6	29	18	-227930	-227930	0
6	29	19	0	0	0
6	29	20	0	0	0
6	29	21	0	0	0
6	29	22	0	0	0
6	29	23	0	0	0
6	30	0	0	0	0
6	30	1	0	0	0
6	30	2	0	0	0
6	30	3	0	0	0
6	30	4	-40559	-40559	0
6	30	5	-400953	-400953	0
6	30	6	-876062	-876062	0
6	30	7	-2156133	-2156133	0
6	30	8	-3014581	-3014581	0
6	30	9	-3643592	-3643592	0
6	30	10	-4075263	-3667736	-407526
6	30	11	-4231049	-3384839	-846210
6	30	12	-4170583	-3544995	-625587
6	30	13	-3891349	-3891349	0
6	30	14	-3404856	-3404856	0
6	30	15	-2707207	-2707207	0
6	30	16	-1806406	-1806406	0
6	30	17	-809311	-809311	0
6	30	18	-178211	-178211	0
6	30	19	0	0	0
6	30	20	0	0	0
6	30	21	0	0	0
6	30	22	0	0	0
6	30	23	0	0	0
7	1	0	0	0	0
7	1	1	0	0	0

7	1	2	0	0	0
7	1	3	0	0	0
7	1	4	-40176	-40176	0
7	1	5	-340075	-340075	0
7	1	6	-894175	-894175	0
7	1	7	-1454038	-1454038	0
7	1	8	-1725680	-1725680	0
7	1	9	-3056971	-3056971	0
7	1	10	-3022092	-3022092	0
7	1	11	-4046177	-4046177	0
7	1	12	-3227133	-3227133	0
7	1	13	-2083821	-2083821	0
7	1	14	-3288527	-3288527	0
7	1	15	-1907975	-1907975	0
7	1	16	-1498026	-1498026	0
7	1	17	-738584	-738584	0
7	1	18	-222889	-222889	0
7	1	19	0	0	0
7	1	20	0	0	0
7	1	21	0	0	0
7	1	22	0	0	0
7	1	23	0	0	0
7	2	0	0	0	0
7	2	1	0	0	0
7	2	2	0	0	0
7	2	3	0	0	0
7	2	4	-15061	-15061	0
7	2	5	-214146	-214146	0
7	2	6	-1071389	-1071389	0
7	2	7	-2101774	-2101774	0
7	2	8	-2926069	-2926069	0
7	2	9	-3545907	-3545907	0
7	2	10	-3927743	-3927743	0
7	2	11	-4110196	-4110196	0
7	2	12	-4064750	-4064750	0
7	2	13	-3514573	-3514573	0
7	2	14	-3203217	-3203217	0
7	2	15	-2587842	-2587842	0
7	2	16	-1716391	-1716391	0
7	2	17	-801407	-801407	0
7	2	18	-200732	-200732	0
7	2	19	0	0	0
7	2	20	0	0	0
7	2	21	0	0	0

7	2	22	0	0	0
7	2	23	0	0	0
7	3	0	0	0	0
7	3	1	0	0	0
7	3	2	0	0	0
7	3	3	0	0	0
7	3	4	-44953	-44953	0
7	3	5	-341510	-341510	0
7	3	6	-1146120	-1146120	0
7	3	7	-2126347	-2126347	0
7	3	8	-2991239	-2991239	0
7	3	9	-3608517	-3608517	0
7	3	10	-3941558	-3941558	0
7	3	11	-4081900	-4081900	0
7	3	12	-4010733	-4010733	0
7	3	13	-3740804	-3740804	0
7	3	14	-3218547	-3218547	0
7	3	15	-2504674	-2504674	0
7	3	16	-1680113	-1680113	0
7	3	17	-717202	-717202	0
7	3	18	-210970	-210970	0
7	3	19	0	0	0
7	3	20	0	0	0
7	3	21	0	0	0
7	3	22	0	0	0
7	3	23	0	0	0
7	4	0	0	0	0
7	4	1	0	0	0
7	4	2	0	0	0
7	4	3	0	0	0
7	4	4	0	0	0
7	4	5	-50443	-50443	0
7	4	6	-288008	-288008	0
7	4	7	-673710	-673710	0
7	4	8	-1023541	-1023541	0
7	4	9	-495326	-495326	0
7	4	10	-1587632	-1587632	0
7	4	11	-2041675	-2041675	0
7	4	12	-3064415	-3064415	0
7	4	13	-2493200	-2493200	0
7	4	14	-2004899	-2004899	0
7	4	15	-1882508	-1882508	0
7	4	16	-1062089	-1062089	0
7	4	17	-667092	-667092	0

7	4	18	-171791	-171791	0
7	4	19	0	0	0
7	4	20	0	0	0
7	4	21	0	0	0
7	4	22	0	0	0
7	4	23	0	0	0
7	5	0	0	0	0
7	5	1	0	0	0
7	5	2	0	0	0
7	5	3	0	0	0
7	5	4	-5043	-5043	0
7	5	5	-272178	-272178	0
7	5	6	-535376	-535376	0
7	5	7	-549516	-549516	0
7	5	8	-1224035	-1224035	0
7	5	9	-382187	-382187	0
7	5	10	-830137	-830137	0
7	5	11	-1299682	-1299682	0
7	5	12	-1238337	-1238337	0
7	5	13	-887338	-887338	0
7	5	14	-913937	-913937	0
7	5	15	-880760	-880760	0
7	5	16	-895740	-895740	0
7	5	17	-194709	-194709	0
7	5	18	-4964	-4964	0
7	5	19	0	0	0
7	5	20	0	0	0
7	5	21	0	0	0
7	5	22	0	0	0
7	5	23	0	0	0
7	6	0	0	0	0
7	6	1	0	0	0
7	6	2	0	0	0
7	6	3	0	0	0
7	6	4	-10088	-10088	0
7	6	5	-251350	-251350	0
7	6	6	-733679	-733679	0
7	6	7	-1601876	-1601876	0
7	6	8	-2295198	-2295198	0
7	6	9	-2649996	-2649996	0
7	6	10	-2649712	-2649712	0
7	6	11	-3650534	-3650534	0
7	6	12	-2939766	-2939766	0
7	6	13	-3364619	-3364619	0

7	6	14	-2899262	-2899262	0
7	6	15	-2353126	-2353126	0
7	6	16	-1623469	-1623469	0
7	6	17	-700965	-700965	0
7	6	18	-219185	-219185	0
7	6	19	0	0	0
7	6	20	0	0	0
7	6	21	0	0	0
7	6	22	0	0	0
7	6	23	0	0	0
7	7	0	0	0	0
7	7	1	0	0	0
7	7	2	0	0	0
7	7	3	0	0	0
7	7	4	-14990	-14990	0
7	7	5	-306520	-306520	0
7	7	6	-584074	-584074	0
7	7	7	-1999513	-1999513	0
7	7	8	-2807956	-2807956	0
7	7	9	-2784976	-2784976	0
7	7	10	-3814569	-3814569	0
7	7	11	-3220862	-3220862	0
7	7	12	-2618607	-2618607	0
7	7	13	-1985536	-1985536	0
7	7	14	-2467018	-2467018	0
7	7	15	-2493058	-2493058	0
7	7	16	-1645186	-1645186	0
7	7	17	-689384	-689384	0
7	7	18	-216917	-216917	0
7	7	19	0	0	0
7	7	20	0	0	0
7	7	21	0	0	0
7	7	22	0	0	0
7	7	23	0	0	0
7	8	0	0	0	0
7	8	1	0	0	0
7	8	2	0	0	0
7	8	3	0	0	0
7	8	4	0	0	0
7	8	5	-364126	-364126	0
7	8	6	-1068283	-1068283	0
7	8	7	-1966880	-1966880	0
7	8	8	-2798058	-2798058	0
7	8	9	-3429349	-3429349	0

7	8	10	-3847305	-3847305	0
7	8	11	-4010904	-4010904	0
7	8	12	-3959158	-3959158	0
7	8	13	-3698425	-3698425	0
7	8	14	-3211417	-3211417	0
7	8	15	-2505026	-2505026	0
7	8	16	-1657130	-1657130	0
7	8	17	-801876	-801876	0
7	8	18	-229089	-229089	0
7	8	19	0	0	0
7	8	20	0	0	0
7	8	21	0	0	0
7	8	22	0	0	0
7	8	23	0	0	0
7	9	0	0	0	0
7	9	1	0	0	0
7	9	2	0	0	0
7	9	3	0	0	0
7	9	4	0	0	0
7	9	5	-358102	-358102	0
7	9	6	-1072532	-1072532	0
7	9	7	-1932570	-1932570	0
7	9	8	-2729589	-2729589	0
7	9	9	-3365063	-3365063	0
7	9	10	-3811219	-3811219	0
7	9	11	-4000935	-4000935	0
7	9	12	-3961877	-3961877	0
7	9	13	-3670490	-3670490	0
7	9	14	-3194492	-3194492	0
7	9	15	-2491224	-2491224	0
7	9	16	-1652617	-1652617	0
7	9	17	-791103	-791103	0
7	9	18	-216437	-216437	0
7	9	19	0	0	0
7	9	20	0	0	0
7	9	21	0	0	0
7	9	22	0	0	0
7	9	23	0	0	0
7	10	0	0	0	0
7	10	1	0	0	0
7	10	2	0	0	0
7	10	3	0	0	0
7	10	4	0	0	0
7	10	5	-275524	-275524	0

7	10	6	-1118763	-1118763	0
7	10	7	-2202436	-2202436	0
7	10	8	-3110064	-3110064	0
7	10	9	-3767209	-3767209	0
7	10	10	-4164612	-4164612	0
7	10	11	-4315875	-3668494	-647381
7	10	12	-4241680	-4241680	0
7	10	13	-3704047	-3704047	0
7	10	14	-3466907	-3466907	0
7	10	15	-2741583	-2741583	0
7	10	16	-1609391	-1609391	0
7	10	17	-729704	-729704	0
7	10	18	-167864	-167864	0
7	10	19	0	0	0
7	10	20	0	0	0
7	10	21	0	0	0
7	10	22	0	0	0
7	10	23	0	0	0
7	11	0	0	0	0
7	11	1	0	0	0
7	11	2	0	0	0
7	11	3	0	0	0
7	11	4	0	0	0
7	11	5	-289140	-289140	0
7	11	6	-1109149	-1109149	0
7	11	7	-2148819	-2148819	0
7	11	8	-3010559	-3010559	0
7	11	9	-3245432	-3245432	0
7	11	10	-4047062	-4047062	0
7	11	11	-4191815	-4191815	0
7	11	12	-2413945	-2413945	0
7	11	13	-2901194	-2901194	0
7	11	14	-2275377	-2275377	0
7	11	15	-2660323	-2660323	0
7	11	16	-1733367	-1733367	0
7	11	17	-522974	-522974	0
7	11	18	-146434	-146434	0
7	11	19	0	0	0
7	11	20	0	0	0
7	11	21	0	0	0
7	11	22	0	0	0
7	11	23	0	0	0
7	12	0	0	0	0
7	12	1	0	0	0

7	12	2	0	0	0
7	12	3	0	0	0
7	12	4	0	0	0
7	12	5	-298461	-298461	0
7	12	6	-952291	-952291	0
7	12	7	-2006194	-2006194	0
7	12	8	-2837418	-2837418	0
7	12	9	-2189319	-2189319	0
7	12	10	-2837439	-2837439	0
7	12	11	-4031852	-4031852	0
7	12	12	-2884373	-2884373	0
7	12	13	-1299678	-1299678	0
7	12	14	-3244857	-3244857	0
7	12	15	-2518042	-2518042	0
7	12	16	-1722926	-1722926	0
7	12	17	-789035	-789035	0
7	12	18	-185546	-185546	0
7	12	19	0	0	0
7	12	20	0	0	0
7	12	21	0	0	0
7	12	22	0	0	0
7	12	23	0	0	0
7	13	0	0	0	0
7	13	1	0	0	0
7	13	2	0	0	0
7	13	3	0	0	0
7	13	4	0	0	0
7	13	5	-286976	-286976	0
7	13	6	-1072856	-1072856	0
7	13	7	-854470	-854470	0
7	13	8	-2976345	-2976345	0
7	13	9	-3590716	-3590716	0
7	13	10	-3973096	-3973096	0
7	13	11	-4154750	-4154750	0
7	13	12	-4109219	-4109219	0
7	13	13	-3863039	-3863039	0
7	13	14	-3374395	-3374395	0
7	13	15	-2656971	-2656971	0
7	13	16	-1745291	-1745291	0
7	13	17	-782508	-782508	0
7	13	18	-189930	-189930	0
7	13	19	0	0	0
7	13	20	0	0	0
7	13	21	0	0	0

7	13	22	0	0	0
7	13	23	0	0	0
7	14	0	0	0	0
7	14	1	0	0	0
7	14	2	0	0	0
7	14	3	0	0	0
7	14	4	0	0	0
7	14	5	-321472	-321472	0
7	14	6	-570803	-570803	0
7	14	7	-241997	-241997	0
7	14	8	-2780417	-2780417	0
7	14	9	-3390666	-3390666	0
7	14	10	-2222481	-2222481	0
7	14	11	-3453493	-3453493	0
7	14	12	-3597939	-3597939	0
7	14	13	-1080587	-1080587	0
7	14	14	-2317312	-2317312	0
7	14	15	-2113292	-2113292	0
7	14	16	-1088399	-1088399	0
7	14	17	-705715	-705715	0
7	14	18	-206205	-206205	0
7	14	19	0	0	0
7	14	20	0	0	0
7	14	21	0	0	0
7	14	22	0	0	0
7	14	23	0	0	0
7	15	0	0	0	0
7	15	1	0	0	0
7	15	2	0	0	0
7	15	3	0	0	0
7	15	4	0	0	0
7	15	5	-246398	-246398	0
7	15	6	-1066421	-1066421	0
7	15	7	-2082293	-2082293	0
7	15	8	-2960335	-2960335	0
7	15	9	-3591172	-3591172	0
7	15	10	-3976682	-3976682	0
7	15	11	-3529029	-3529029	0
7	15	12	-4105184	-4105184	0
7	15	13	-3807671	-3807671	0
7	15	14	-3342989	-3342989	0
7	15	15	-2635459	-2635459	0
7	15	16	-1035295	-1035295	0
7	15	17	-765661	-765661	0

7	15	18	-159963	-159963	0
7	15	19	0	0	0
7	15	20	0	0	0
7	15	21	0	0	0
7	15	22	0	0	0
7	15	23	0	0	0
7	16	0	0	0	0
7	16	1	0	0	0
7	16	2	0	0	0
7	16	3	0	0	0
7	16	4	0	0	0
7	16	5	-233343	-233343	0
7	16	6	-1074060	-1074060	0
7	16	7	-2103041	-2103041	0
7	16	8	-2972647	-2972647	0
7	16	9	-3609724	-3609724	0
7	16	10	-4008877	-4008877	0
7	16	11	-4191436	-4191436	0
7	16	12	-4130454	-4130454	0
7	16	13	-3863180	-3863180	0
7	16	14	-3390814	-3390814	0
7	16	15	-2682140	-2682140	0
7	16	16	-1763832	-1763832	0
7	16	17	-748753	-748753	0
7	16	18	-140623	-140623	0
7	16	19	0	0	0
7	16	20	0	0	0
7	16	21	0	0	0
7	16	22	0	0	0
7	16	23	0	0	0
7	17	0	0	0	0
7	17	1	0	0	0
7	17	2	0	0	0
7	17	3	0	0	0
7	17	4	0	0	0
7	17	5	-258611	-258611	0
7	17	6	-942550	-942550	0
7	17	7	-1998972	-1998972	0
7	17	8	-2834248	-2834248	0
7	17	9	-3450908	-3450908	0
7	17	10	-3891087	-3891087	0
7	17	11	-4064871	-4064871	0
7	17	12	-3634212	-3634212	0
7	17	13	-3446957	-3446957	0

7	17	14	-3264024	-3264024	0
7	17	15	-2129184	-2129184	0
7	17	16	-1449010	-1449010	0
7	17	17	-745129	-745129	0
7	17	18	-158789	-158789	0
7	17	19	0	0	0
7	17	20	0	0	0
7	17	21	0	0	0
7	17	22	0	0	0
7	17	23	0	0	0
7	18	0	0	0	0
7	18	1	0	0	0
7	18	2	0	0	0
7	18	3	0	0	0
7	18	4	0	0	0
7	18	5	-250277	-250277	0
7	18	6	-908347	-908347	0
7	18	7	-1791010	-1791010	0
7	18	8	-2751587	-2751587	0
7	18	9	-3367978	-3367978	0
7	18	10	-3388331	-3388331	0
7	18	11	-3168714	-3168714	0
7	18	12	-3120667	-3120667	0
7	18	13	-3387974	-3387974	0
7	18	14	-2778912	-2778912	0
7	18	15	-2244097	-2244097	0
7	18	16	-1547543	-1547543	0
7	18	17	-601506	-601506	0
7	18	18	-176450	-176450	0
7	18	19	0	0	0
7	18	20	0	0	0
7	18	21	0	0	0
7	18	22	0	0	0
7	18	23	0	0	0
7	19	0	0	0	0
7	19	1	0	0	0
7	19	2	0	0	0
7	19	3	0	0	0
7	19	4	0	0	0
7	19	5	-293792	-293792	0
7	19	6	-761090	-761090	0
7	19	7	-1715592	-1715592	0
7	19	8	-2280746	-2280746	0
7	19	9	-2592119	-2592119	0

7	19	10	-1932875	-1932875	0
7	19	11	-3538709	-3538709	0
7	19	12	-3422780	-3422780	0
7	19	13	-3524310	-3524310	0
7	19	14	-3046807	-3046807	0
7	19	15	-2390127	-2390127	0
7	19	16	-1557961	-1557961	0
7	19	17	-755036	-755036	0
7	19	18	-172847	-172847	0
7	19	19	0	0	0
7	19	20	0	0	0
7	19	21	0	0	0
7	19	22	0	0	0
7	19	23	0	0	0
7	20	0	0	0	0
7	20	1	0	0	0
7	20	2	0	0	0
7	20	3	0	0	0
7	20	4	0	0	0
7	20	5	-231767	-231767	0
7	20	6	-669032	-669032	0
7	20	7	-796436	-796436	0
7	20	8	-2255791	-2255791	0
7	20	9	-2055680	-2055680	0
7	20	10	-2480850	-2480850	0
7	20	11	-3797314	-3797314	0
7	20	12	-1298667	-1298667	0
7	20	13	-2458766	-2458766	0
7	20	14	-2956343	-2956343	0
7	20	15	-2336519	-2336519	0
7	20	16	-1442693	-1442693	0
7	20	17	-759889	-759889	0
7	20	18	-185460	-185460	0
7	20	19	0	0	0
7	20	20	0	0	0
7	20	21	0	0	0
7	20	22	0	0	0
7	20	23	0	0	0
7	21	0	0	0	0
7	21	1	0	0	0
7	21	2	0	0	0
7	21	3	0	0	0
7	21	4	0	0	0
7	21	5	-19706	-19706	0

7	21	6	-146724	-146724	0
7	21	7	-1844869	-1844869	0
7	21	8	-2628019	-2628019	0
7	21	9	-3240102	-3240102	0
7	21	10	-962294	-962294	0
7	21	11	-1538456	-1538456	0
7	21	12	-2783154	-2783154	0
7	21	13	-1835565	-1835565	0
7	21	14	-269887	-269887	0
7	21	15	-2462081	-2462081	0
7	21	16	-770640	-770640	0
7	21	17	-38434	-38434	0
7	21	18	-188191	-188191	0
7	21	19	0	0	0
7	21	20	0	0	0
7	21	21	0	0	0
7	21	22	0	0	0
7	21	23	0	0	0
7	22	0	0	0	0
7	22	1	0	0	0
7	22	2	0	0	0
7	22	3	0	0	0
7	22	4	0	0	0
7	22	5	-239078	-239078	0
7	22	6	-1007916	-1007916	0
7	22	7	-712716	-712716	0
7	22	8	-1310680	-1310680	0
7	22	9	-1902615	-1902615	0
7	22	10	-2930868	-2930868	0
7	22	11	-2677104	-2677104	0
7	22	12	-2150161	-2150161	0
7	22	13	-3656358	-3656358	0
7	22	14	-2092053	-2092053	0
7	22	15	-2444519	-2444519	0
7	22	16	-932204	-932204	0
7	22	17	-547689	-547689	0
7	22	18	-146244	-146244	0
7	22	19	0	0	0
7	22	20	0	0	0
7	22	21	0	0	0
7	22	22	0	0	0
7	22	23	0	0	0
7	23	0	0	0	0
7	23	1	0	0	0

7	23	2	0	0	0
7	23	3	0	0	0
7	23	4	0	0	0
7	23	5	-29985	-29985	0
7	23	6	-687482	-687482	0
7	23	7	-419209	-419209	0
7	23	8	-2009729	-2009729	0
7	23	9	-509056	-509056	0
7	23	10	-1343937	-1343937	0
7	23	11	-1053676	-1053676	0
7	23	12	-1597633	-1597633	0
7	23	13	-2289707	-2289707	0
7	23	14	-129376	-129376	0
7	23	15	-1575567	-1575567	0
7	23	16	-1548744	-1548744	0
7	23	17	-19379	-19379	0
7	23	18	0	0	0
7	23	19	0	0	0
7	23	20	0	0	0
7	23	21	0	0	0
7	23	22	0	0	0
7	23	23	0	0	0
7	24	0	0	0	0
7	24	1	0	0	0
7	24	2	0	0	0
7	24	3	0	0	0
7	24	4	0	0	0
7	24	5	-248540	-248540	0
7	24	6	-911246	-911246	0
7	24	7	-1065489	-1065489	0
7	24	8	-2052926	-2052926	0
7	24	9	-1875739	-1875739	0
7	24	10	-787503	-787503	0
7	24	11	-3060771	-3060771	0
7	24	12	-1191128	-1191128	0
7	24	13	-1054480	-1054480	0
7	24	14	-478168	-478168	0
7	24	15	-223145	-223145	0
7	24	16	-364830	-364830	0
7	24	17	-19738	-19738	0
7	24	18	-4949	-4949	0
7	24	19	0	0	0
7	24	20	0	0	0
7	24	21	0	0	0

7	24	22	0	0	0
7	24	23	0	0	0
7	25	0	0	0	0
7	25	1	0	0	0
7	25	2	0	0	0
7	25	3	0	0	0
7	25	4	0	0	0
7	25	5	-248640	-248640	0
7	25	6	-1022163	-1022163	0
7	25	7	-2063273	-2063273	0
7	25	8	-2958748	-2958748	0
7	25	9	-3631444	-3631444	0
7	25	10	-4054320	-4054320	0
7	25	11	-3810859	-3810859	0
7	25	12	-3811095	-3811095	0
7	25	13	-3528339	-3528339	0
7	25	14	-3119614	-3119614	0
7	25	15	-2684897	-2684897	0
7	25	16	-1740766	-1740766	0
7	25	17	-723599	-723599	0
7	25	18	-128319	-128319	0
7	25	19	0	0	0
7	25	20	0	0	0
7	25	21	0	0	0
7	25	22	0	0	0
7	25	23	0	0	0
7	26	0	0	0	0
7	26	1	0	0	0
7	26	2	0	0	0
7	26	3	0	0	0
7	26	4	0	0	0
7	26	5	-234083	-234083	0
7	26	6	-995779	-995779	0
7	26	7	-2023765	-2023765	0
7	26	8	-2914202	-2914202	0
7	26	9	-3567030	-3567030	0
7	26	10	-3930558	-3930558	0
7	26	11	-1171449	-1171449	0
7	26	12	-4145067	-4145067	0
7	26	13	-2063098	-2063098	0
7	26	14	-3277160	-3277160	0
7	26	15	-2516279	-2516279	0
7	26	16	-1650653	-1650653	0
7	26	17	-738619	-738619	0

7	26	18	-164704	-164704	0
7	26	19	0	0	0
7	26	20	0	0	0
7	26	21	0	0	0
7	26	22	0	0	0
7	26	23	0	0	0
7	27	0	0	0	0
7	27	1	0	0	0
7	27	2	0	0	0
7	27	3	0	0	0
7	27	4	0	0	0
7	27	5	-14923	-14923	0
7	27	6	-353032	-353032	0
7	27	7	-122595	-122595	0
7	27	8	-1955378	-1955378	0
7	27	9	-2276568	-2276568	0
7	27	10	-2866355	-2866355	0
7	27	11	-1463733	-1463733	0
7	27	12	-640483	-640483	0
7	27	13	-363802	-363802	0
7	27	14	-210516	-210516	0
7	27	15	-808546	-808546	0
7	27	16	-506641	-506641	0
7	27	17	-103664	-103664	0
7	27	18	-44708	-44708	0
7	27	19	0	0	0
7	27	20	0	0	0
7	27	21	0	0	0
7	27	22	0	0	0
7	27	23	0	0	0
7	28	0	0	0	0
7	28	1	0	0	0
7	28	2	0	0	0
7	28	3	0	0	0
7	28	4	0	0	0
7	28	5	-244637	-244637	0
7	28	6	-985022	-985022	0
7	28	7	-2000248	-2000248	0
7	28	8	-2880841	-2880841	0
7	28	9	-3533307	-3533307	0
7	28	10	-3911289	-3911289	0
7	28	11	-4098637	-4098637	0
7	28	12	-4052131	-4052131	0
7	28	13	-3744656	-3744656	0

7	28	14	-3242616	-3242616	0
7	28	15	-2528097	-2528097	0
7	28	16	-962703	-962703	0
7	28	17	-708859	-708859	0
7	28	18	-144293	-144293	0
7	28	19	0	0	0
7	28	20	0	0	0
7	28	21	0	0	0
7	28	22	0	0	0
7	28	23	0	0	0
7	29	0	0	0	0
7	29	1	0	0	0
7	29	2	0	0	0
7	29	3	0	0	0
7	29	4	0	0	0
7	29	5	-228171	-228171	0
7	29	6	-953252	-953252	0
7	29	7	-1939468	-1939468	0
7	29	8	-2835173	-2835173	0
7	29	9	-3505861	-3505861	0
7	29	10	-3931722	-3931722	0
7	29	11	-4126656	-4126656	0
7	29	12	-4088787	-4088787	0
7	29	13	-3783373	-3783373	0
7	29	14	-3274026	-3274026	0
7	29	15	-2569785	-2569785	0
7	29	16	-1648488	-1648488	0
7	29	17	-594360	-594360	0
7	29	18	-142840	-142840	0
7	29	19	0	0	0
7	29	20	0	0	0
7	29	21	0	0	0
7	29	22	0	0	0
7	29	23	0	0	0
7	30	0	0	0	0
7	30	1	0	0	0
7	30	2	0	0	0
7	30	3	0	0	0
7	30	4	0	0	0
7	30	5	-205303	-205303	0
7	30	6	-826672	-826672	0
7	30	7	-2008187	-2008187	0
7	30	8	-2905648	-2905648	0
7	30	9	-3544410	-3544410	0

7	30	10	-3936858	-3936858	0
7	30	11	-4109594	-4109594	0
7	30	12	-4049053	-4049053	0
7	30	13	-3774361	-3774361	0
7	30	14	-3244345	-3244345	0
7	30	15	-1938641	-1938641	0
7	30	16	-1306199	-1306199	0
7	30	17	-527119	-527119	0
7	30	18	-121658	-121658	0
7	30	19	0	0	0
7	30	20	0	0	0
7	30	21	0	0	0
7	30	22	0	0	0
7	30	23	0	0	0
7	31	0	0	0	0
7	31	1	0	0	0
7	31	2	0	0	0
7	31	3	0	0	0
7	31	4	0	0	0
7	31	5	-64315	-64315	0
7	31	6	-307991	-307991	0
7	31	7	-1456991	-1456991	0
7	31	8	-2648619	-2648619	0
7	31	9	-3290060	-3290060	0
7	31	10	-3793178	-3793178	0
7	31	11	-4025226	-4025226	0
7	31	12	-3988519	-3988519	0
7	31	13	-3655381	-3655381	0
7	31	14	-3152591	-3152591	0
7	31	15	-2440724	-2440724	0
7	31	16	-1322782	-1322782	0
7	31	17	-618938	-618938	0
7	31	18	-130368	-130368	0
7	31	19	0	0	0
7	31	20	0	0	0
7	31	21	0	0	0
7	31	22	0	0	0
7	31	23	0	0	0
8	1	0	0	0	0
8	1	1	0	0	0
8	1	2	0	0	0
8	1	3	0	0	0
8	1	4	0	0	0
8	1	5	-146813	-146813	0

8	1	6	-618107	-618107	0
8	1	7	-1229841	-1229841	0
8	1	8	-2004324	-2004324	0
8	1	9	-2653023	-2653023	0
8	1	10	-2890529	-2890529	0
8	1	11	-3355405	-3355405	0
8	1	12	-2628839	-2628839	0
8	1	13	-3473227	-3473227	0
8	1	14	-3032309	-3032309	0
8	1	15	-2420447	-2420447	0
8	1	16	-1609564	-1609564	0
8	1	17	-643380	-643380	0
8	1	18	-101112	-101112	0
8	1	19	0	0	0
8	1	20	0	0	0
8	1	21	0	0	0
8	1	22	0	0	0
8	1	23	0	0	0
8	2	0	0	0	0
8	2	1	0	0	0
8	2	2	0	0	0
8	2	3	0	0	0
8	2	4	0	0	0
8	2	5	-155701	-155701	0
8	2	6	-778633	-778633	0
8	2	7	-2003337	-2003337	0
8	2	8	-2906686	-2906686	0
8	2	9	-3556674	-3556674	0
8	2	10	-3972540	-3972540	0
8	2	11	-4155195	-4155195	0
8	2	12	-4099827	-4099827	0
8	2	13	-3838686	-3838686	0
8	2	14	-3356976	-3356976	0
8	2	15	-2635055	-2635055	0
8	2	16	-1263539	-1263539	0
8	2	17	-595717	-595717	0
8	2	18	-108589	-108589	0
8	2	19	0	0	0
8	2	20	0	0	0
8	2	21	0	0	0
8	2	22	0	0	0
8	2	23	0	0	0
8	3	0	0	0	0
8	3	1	0	0	0

8	3	2	0	0	0
8	3	3	0	0	0
8	3	4	0	0	0
8	3	5	-171160	-171160	0
8	3	6	-775974	-775974	0
8	3	7	-1628818	-1628818	0
8	3	8	-2975400	-2975400	0
8	3	9	-3633657	-3633657	0
8	3	10	-4051757	-4051757	0
8	3	11	-4222691	-4222691	0
8	3	12	-3796495	-3796495	0
8	3	13	-3628589	-3628589	0
8	3	14	-3034543	-3034543	0
8	3	15	-1850038	-1850038	0
8	3	16	-1686621	-1686621	0
8	3	17	-646951	-646951	0
8	3	18	-104289	-104289	0
8	3	19	0	0	0
8	3	20	0	0	0
8	3	21	0	0	0
8	3	22	0	0	0
8	3	23	0	0	0
8	4	0	0	0	0
8	4	1	0	0	0
8	4	2	0	0	0
8	4	3	0	0	0
8	4	4	0	0	0
8	4	5	-187725	-187725	0
8	4	6	-938525	-938525	0
8	4	7	-1966052	-1966052	0
8	4	8	-2869096	-2869096	0
8	4	9	-3523290	-3523290	0
8	4	10	-1354864	-1354864	0
8	4	11	-1252114	-1252114	0
8	4	12	-4139842	-4139842	0
8	4	13	-3801853	-3801853	0
8	4	14	-3311185	-3311185	0
8	4	15	-2590137	-2590137	0
8	4	16	-1653792	-1653792	0
8	4	17	-644179	-644179	0
8	4	18	-104708	-104708	0
8	4	19	0	0	0
8	4	20	0	0	0
8	4	21	0	0	0

8	4	22	0	0	0
8	4	23	0	0	0
8	5	0	0	0	0
8	5	1	0	0	0
8	5	2	0	0	0
8	5	3	0	0	0
8	5	4	0	0	0
8	5	5	-211433	-211433	0
8	5	6	-716604	-716604	0
8	5	7	-1363712	-1363712	0
8	5	8	-2106023	-2106023	0
8	5	9	-3405976	-3405976	0
8	5	10	-3775836	-3775836	0
8	5	11	-3243048	-3243048	0
8	5	12	-3945525	-3945525	0
8	5	13	-1452838	-1452838	0
8	5	14	-758044	-758044	0
8	5	15	-2132724	-2132724	0
8	5	16	-581744	-581744	0
8	5	17	-338374	-338374	0
8	5	18	-63774	-63774	0
8	5	19	0	0	0
8	5	20	0	0	0
8	5	21	0	0	0
8	5	22	0	0	0
8	5	23	0	0	0
8	6	0	0	0	0
8	6	1	0	0	0
8	6	2	0	0	0
8	6	3	0	0	0
8	6	4	0	0	0
8	6	5	-173299	-173299	0
8	6	6	-939547	-939547	0
8	6	7	-1985742	-1985742	0
8	6	8	-2890693	-2890693	0
8	6	9	-3545390	-3545390	0
8	6	10	-3950744	-3950744	0
8	6	11	-4109304	-4109304	0
8	6	12	-4056838	-4056838	0
8	6	13	-3806215	-3806215	0
8	6	14	-2705554	-2705554	0
8	6	15	-2554035	-2554035	0
8	6	16	-1596853	-1596853	0
8	6	17	-631873	-631873	0

8	6	18	-103734	-103734	0
8	6	19	0	0	0
8	6	20	0	0	0
8	6	21	0	0	0
8	6	22	0	0	0
8	6	23	0	0	0
8	7	0	0	0	0
8	7	1	0	0	0
8	7	2	0	0	0
8	7	3	0	0	0
8	7	4	0	0	0
8	7	5	-174891	-174891	0
8	7	6	-963684	-963684	0
8	7	7	-2074940	-2074940	0
8	7	8	-2860280	-2860280	0
8	7	9	-3419843	-3419843	0
8	7	10	-3811340	-3811340	0
8	7	11	-4308229	-4308229	0
8	7	12	-4220079	-4220079	0
8	7	13	-3926266	-3926266	0
8	7	14	-3127682	-3127682	0
8	7	15	-2315273	-2315273	0
8	7	16	-1671665	-1671665	0
8	7	17	-614293	-614293	0
8	7	18	-82507	-82507	0
8	7	19	0	0	0
8	7	20	0	0	0
8	7	21	0	0	0
8	7	22	0	0	0
8	7	23	0	0	0
8	8	0	0	0	0
8	8	1	0	0	0
8	8	2	0	0	0
8	8	3	0	0	0
8	8	4	0	0	0
8	8	5	-187051	-187051	0
8	8	6	-600070	-600070	0
8	8	7	-161703	-161703	0
8	8	8	-1309153	-1309153	0
8	8	9	-1530169	-1530169	0
8	8	10	-238744	-238744	0
8	8	11	-2741419	-2741419	0
8	8	12	-2210997	-2210997	0
8	8	13	-1632003	-1632003	0

8	8	14	-2414764	-2414764	0
8	8	15	-1238852	-1238852	0
8	8	16	-664723	-664723	0
8	8	17	-174128	-174128	0
8	8	18	-24578	-24578	0
8	8	19	0	0	0
8	8	20	0	0	0
8	8	21	0	0	0
8	8	22	0	0	0
8	8	23	0	0	0
8	9	0	0	0	0
8	9	1	0	0	0
8	9	2	0	0	0
8	9	3	0	0	0
8	9	4	0	0	0
8	9	5	-140199	-140199	0
8	9	6	-961933	-961933	0
8	9	7	-2083051	-2083051	0
8	9	8	-3054983	-3054983	0
8	9	9	-3770394	-3770394	0
8	9	10	-4219304	-4219304	0
8	9	11	-4407231	-4407231	0
8	9	12	-4339057	-4339057	0
8	9	13	-4043960	-4043960	0
8	9	14	-3501702	-3501702	0
8	9	15	-2724159	-2724159	0
8	9	16	-1704188	-1704188	0
8	9	17	-618893	-618893	0
8	9	18	-75023	-75023	0
8	9	19	0	0	0
8	9	20	0	0	0
8	9	21	0	0	0
8	9	22	0	0	0
8	9	23	0	0	0
8	10	0	0	0	0
8	10	1	0	0	0
8	10	2	0	0	0
8	10	3	0	0	0
8	10	4	0	0	0
8	10	5	-138050	-138050	0
8	10	6	-606432	-606432	0
8	10	7	-1184409	-1184409	0
8	10	8	-2080290	-2080290	0
8	10	9	-3709157	-3709157	0

8	10	10	-4109603	-4109603	0
8	10	11	-4274565	-4274565	0
8	10	12	-3554332	-3554332	0
8	10	13	-3088617	-3088617	0
8	10	14	-3116613	-3116613	0
8	10	15	-2222368	-2222368	0
8	10	16	-1608921	-1608921	0
8	10	17	-526398	-526398	0
8	10	18	-89757	-89757	0
8	10	19	0	0	0
8	10	20	0	0	0
8	10	21	0	0	0
8	10	22	0	0	0
8	10	23	0	0	0
8	11	0	0	0	0
8	11	1	0	0	0
8	11	2	0	0	0
8	11	3	0	0	0
8	11	4	0	0	0
8	11	5	-10091	-10091	0
8	11	6	-238813	-238813	0
8	11	7	-118437	-118437	0
8	11	8	-944935	-944935	0
8	11	9	-1189086	-1189086	0
8	11	10	-905393	-905393	0
8	11	11	-774656	-774656	0
8	11	12	-634284	-634284	0
8	11	13	-1757238	-1757238	0
8	11	14	-1515139	-1515139	0
8	11	15	-1153745	-1153745	0
8	11	16	-521446	-521446	0
8	11	17	-315217	-315217	0
8	11	18	-29735	-29735	0
8	11	19	0	0	0
8	11	20	0	0	0
8	11	21	0	0	0
8	11	22	0	0	0
8	11	23	0	0	0
8	12	0	0	0	0
8	12	1	0	0	0
8	12	2	0	0	0
8	12	3	0	0	0
8	12	4	0	0	0
8	12	5	-174802	-174802	0

8	12	6	-283379	-283379	0
8	12	7	-521991	-521991	0
8	12	8	-936678	-936678	0
8	12	9	-3283133	-3283133	0
8	12	10	-2979509	-2979509	0
8	12	11	-3027318	-3027318	0
8	12	12	-3822756	-3822756	0
8	12	13	-2204794	-2204794	0
8	12	14	-1280641	-1280641	0
8	12	15	-2335018	-2335018	0
8	12	16	-1465454	-1465454	0
8	12	17	-570096	-570096	0
8	12	18	-73743	-73743	0
8	12	19	0	0	0
8	12	20	0	0	0
8	12	21	0	0	0
8	12	22	0	0	0
8	12	23	0	0	0
8	13	0	0	0	0
8	13	1	0	0	0
8	13	2	0	0	0
8	13	3	0	0	0
8	13	4	0	0	0
8	13	5	-161539	-161539	0
8	13	6	-853192	-853192	0
8	13	7	-1442007	-1442007	0
8	13	8	-1808041	-1808041	0
8	13	9	-2935824	-2935824	0
8	13	10	-3095308	-3095308	0
8	13	11	-3255814	-3255814	0
8	13	12	-2876750	-2876750	0
8	13	13	-3123586	-3123586	0
8	13	14	-2122323	-2122323	0
8	13	15	-1644483	-1644483	0
8	13	16	-1211491	-1211491	0
8	13	17	-81379	-81379	0
8	13	18	-4896	-4896	0
8	13	19	0	0	0
8	13	20	0	0	0
8	13	21	0	0	0
8	13	22	0	0	0
8	13	23	0	0	0
8	14	0	0	0	0
8	14	1	0	0	0

8	14	2	0	0	0
8	14	3	0	0	0
8	14	4	0	0	0
8	14	5	-9851	-9851	0
8	14	6	-500057	-500057	0
8	14	7	-671042	-671042	0
8	14	8	-1472060	-1472060	0
8	14	9	-2004111	-2004111	0
8	14	10	-2056680	-2056680	0
8	14	11	-1812887	-1812887	0
8	14	12	-2156058	-2156058	0
8	14	13	-2767887	-2767887	0
8	14	14	-2152928	-2152928	0
8	14	15	-2092803	-2092803	0
8	14	16	-1106407	-1106407	0
8	14	17	-426531	-426531	0
8	14	18	-58804	-58804	0
8	14	19	0	0	0
8	14	20	0	0	0
8	14	21	0	0	0
8	14	22	0	0	0
8	14	23	0	0	0
8	15	0	0	0	0
8	15	1	0	0	0
8	15	2	0	0	0
8	15	3	0	0	0
8	15	4	0	0	0
8	15	5	-109904	-109904	0
8	15	6	-194015	-194015	0
8	15	7	-302188	-302188	0
8	15	8	-1110468	-1110468	0
8	15	9	-1176688	-1176688	0
8	15	10	-1593120	-1593120	0
8	15	11	-1529645	-1529645	0
8	15	12	-1082033	-1082033	0
8	15	13	-1942429	-1942429	0
8	15	14	-935817	-935817	0
8	15	15	-592852	-592852	0
8	15	16	-563553	-563553	0
8	15	17	-557932	-557932	0
8	15	18	-64786	-64786	0
8	15	19	0	0	0
8	15	20	0	0	0
8	15	21	0	0	0

8	15	22	0	0	0
8	15	23	0	0	0
8	16	0	0	0	0
8	16	1	0	0	0
8	16	2	0	0	0
8	16	3	0	0	0
8	16	4	0	0	0
8	16	5	-150738	-150738	0
8	16	6	-886796	-886796	0
8	16	7	-1959251	-1959251	0
8	16	8	-2893758	-2893758	0
8	16	9	-3573306	-3573306	0
8	16	10	-4003144	-3602830	-400314
8	16	11	-3468122	-3468122	0
8	16	12	-2750495	-2750495	0
8	16	13	-1302626	-1302626	0
8	16	14	-3341709	-3341709	0
8	16	15	-2530119	-2530119	0
8	16	16	-1538402	-1538402	0
8	16	17	-513501	-513501	0
8	16	18	-44636	-44636	0
8	16	19	0	0	0
8	16	20	0	0	0
8	16	21	0	0	0
8	16	22	0	0	0
8	16	23	0	0	0
8	17	0	0	0	0
8	17	1	0	0	0
8	17	2	0	0	0
8	17	3	0	0	0
8	17	4	0	0	0
8	17	5	-142343	-142343	0
8	17	6	-602581	-602581	0
8	17	7	-1054636	-1054636	0
8	17	8	-1605334	-1605334	0
8	17	9	-2984998	-2984998	0
8	17	10	-3867138	-3867138	0
8	17	11	-4026056	-4026056	0
8	17	12	-3965569	-3965569	0
8	17	13	-3668942	-3668942	0
8	17	14	-2417731	-2417731	0
8	17	15	-2396705	-2396705	0
8	17	16	-1432044	-1432044	0
8	17	17	-525639	-525639	0

8	17	18	-34251	-34251	0
8	17	19	0	0	0
8	17	20	0	0	0
8	17	21	0	0	0
8	17	22	0	0	0
8	17	23	0	0	0
8	18	0	0	0	0
8	18	1	0	0	0
8	18	2	0	0	0
8	18	3	0	0	0
8	18	4	0	0	0
8	18	5	-151849	-151849	0
8	18	6	-602772	-602772	0
8	18	7	-1841142	-1841142	0
8	18	8	-1863965	-1863965	0
8	18	9	-3426196	-3426196	0
8	18	10	-3825041	-3825041	0
8	18	11	-4030367	-4030367	0
8	18	12	-3966077	-3966077	0
8	18	13	-3700821	-3700821	0
8	18	14	-3186005	-3186005	0
8	18	15	-1847672	-1847672	0
8	18	16	-1410955	-1410955	0
8	18	17	-399523	-399523	0
8	18	18	-33971	-33971	0
8	18	19	0	0	0
8	18	20	0	0	0
8	18	21	0	0	0
8	18	22	0	0	0
8	18	23	0	0	0
8	19	0	0	0	0
8	19	1	0	0	0
8	19	2	0	0	0
8	19	3	0	0	0
8	19	4	0	0	0
8	19	5	-127145	-127145	0
8	19	6	-822485	-822485	0
8	19	7	-1978741	-1978741	0
8	19	8	-2957720	-2957720	0
8	19	9	-3043815	-3043815	0
8	19	10	-3749060	-3749060	0
8	19	11	-4280486	-4280486	0
8	19	12	-4193265	-4193265	0
8	19	13	-3896584	-3896584	0

8	19	14	-3343862	-3343862	0
8	19	15	-2557130	-2557130	0
8	19	16	-1531268	-1531268	0
8	19	17	-491721	-491721	0
8	19	18	-33140	-33140	0
8	19	19	0	0	0
8	19	20	0	0	0
8	19	21	0	0	0
8	19	22	0	0	0
8	19	23	0	0	0
8	20	0	0	0	0
8	20	1	0	0	0
8	20	2	0	0	0
8	20	3	0	0	0
8	20	4	0	0	0
8	20	5	-121962	-121962	0
8	20	6	-866872	-866872	0
8	20	7	-1906125	-1906125	0
8	20	8	-2755757	-2755757	0
8	20	9	-3014594	-3014594	0
8	20	10	-3627708	-3627708	0
8	20	11	-3783917	-3783917	0
8	20	12	-3729471	-3729471	0
8	20	13	-3434109	-3434109	0
8	20	14	-2540314	-2540314	0
8	20	15	-1594924	-1594924	0
8	20	16	-887318	-887318	0
8	20	17	-268649	-268649	0
8	20	18	0	0	0
8	20	19	0	0	0
8	20	20	0	0	0
8	20	21	0	0	0
8	20	22	0	0	0
8	20	23	0	0	0
8	21	0	0	0	0
8	21	1	0	0	0
8	21	2	0	0	0
8	21	3	0	0	0
8	21	4	0	0	0
8	21	5	-81466	-81466	0
8	21	6	-243177	-243177	0
8	21	7	-436944	-436944	0
8	21	8	-689729	-689729	0
8	21	9	-981594	-981594	0

8	21	10	-792115	-792115	0
8	21	11	-986673	-986673	0
8	21	12	-1713543	-1713543	0
8	21	13	-1712898	-1712898	0
8	21	14	-1029924	-1029924	0
8	21	15	-416630	-416630	0
8	21	16	-1486268	-1486268	0
8	21	17	-476767	-476767	0
8	21	18	0	0	0
8	21	19	0	0	0
8	21	20	0	0	0
8	21	21	0	0	0
8	21	22	0	0	0
8	21	23	0	0	0
8	22	0	0	0	0
8	22	1	0	0	0
8	22	2	0	0	0
8	22	3	0	0	0
8	22	4	0	0	0
8	22	5	-126312	-126312	0
8	22	6	-412095	-412095	0
8	22	7	-759200	-759200	0
8	22	8	-1102283	-1102283	0
8	22	9	-1269279	-1269279	0
8	22	10	-1350263	-1350263	0
8	22	11	-1610324	-1610324	0
8	22	12	-1609852	-1609852	0
8	22	13	-938233	-938233	0
8	22	14	-857427	-857427	0
8	22	15	-625606	-625606	0
8	22	16	-591115	-591115	0
8	22	17	-466650	-466650	0
8	22	18	0	0	0
8	22	19	0	0	0
8	22	20	0	0	0
8	22	21	0	0	0
8	22	22	0	0	0
8	22	23	0	0	0
8	23	0	0	0	0
8	23	1	0	0	0
8	23	2	0	0	0
8	23	3	0	0	0
8	23	4	0	0	0
8	23	5	-120727	-120727	0

8	23	6	-825141	-825141	0
8	23	7	-1884413	-1884413	0
8	23	8	-2822028	-2822028	0
8	23	9	-3520969	-3520969	0
8	23	10	-3932876	-3342945	-589931
8	23	11	-4099515	-3484588	-614927
8	23	12	-4023862	-4023862	0
8	23	13	-3742553	-3742553	0
8	23	14	-3197995	-3197995	0
8	23	15	-2406507	-2406507	0
8	23	16	-1426862	-1426862	0
8	23	17	-425527	-425527	0
8	23	18	0	0	0
8	23	19	0	0	0
8	23	20	0	0	0
8	23	21	0	0	0
8	23	22	0	0	0
8	23	23	0	0	0
8	24	0	0	0	0
8	24	1	0	0	0
8	24	2	0	0	0
8	24	3	0	0	0
8	24	4	0	0	0
8	24	5	-103970	-103970	0
8	24	6	-681724	-681724	0
8	24	7	-1802710	-1802710	0
8	24	8	-2596003	-2596003	0
8	24	9	-2898757	-2898757	0
8	24	10	-2904075	-2904075	0
8	24	11	-3491813	-3491813	0
8	24	12	-3188034	-3188034	0
8	24	13	-3388899	-3388899	0
8	24	14	-3125725	-3125725	0
8	24	15	-2344451	-2344451	0
8	24	16	-1368122	-1368122	0
8	24	17	-416593	-416593	0
8	24	18	0	0	0
8	24	19	0	0	0
8	24	20	0	0	0
8	24	21	0	0	0
8	24	22	0	0	0
8	24	23	0	0	0
8	25	0	0	0	0
8	25	1	0	0	0

8	25	2	0	0	0
8	25	3	0	0	0
8	25	4	0	0	0
8	25	5	-111731	-111731	0
8	25	6	-794182	-794182	0
8	25	7	-1801846	-1801846	0
8	25	8	-2708665	-2708665	0
8	25	9	-3396108	-3396108	0
8	25	10	-3807740	-3807740	0
8	25	11	-3996267	-3996267	0
8	25	12	-3603598	-3603598	0
8	25	13	-3656557	-3656557	0
8	25	14	-3116631	-3116631	0
8	25	15	-2328995	-2328995	0
8	25	16	-1169672	-1169672	0
8	25	17	-380382	-380382	0
8	25	18	0	0	0
8	25	19	0	0	0
8	25	20	0	0	0
8	25	21	0	0	0
8	25	22	0	0	0
8	25	23	0	0	0
8	26	0	0	0	0
8	26	1	0	0	0
8	26	2	0	0	0
8	26	3	0	0	0
8	26	4	0	0	0
8	26	5	-15060	-15060	0
8	26	6	-278297	-278297	0
8	26	7	-742976	-742976	0
8	26	8	-1280444	-1280444	0
8	26	9	-1967005	-1967005	0
8	26	10	-2465503	-2465503	0
8	26	11	-2240792	-2240792	0
8	26	12	-2057057	-2057057	0
8	26	13	-1146203	-1146203	0
8	26	14	-852006	-852006	0
8	26	15	-885059	-885059	0
8	26	16	-181090	-181090	0
8	26	17	-323034	-323034	0
8	26	18	0	0	0
8	26	19	0	0	0
8	26	20	0	0	0
8	26	21	0	0	0

8	26	22	0	0	0
8	26	23	0	0	0
8	27	0	0	0	0
8	27	1	0	0	0
8	27	2	0	0	0
8	27	3	0	0	0
8	27	4	0	0	0
8	27	5	-64971	-64971	0
8	27	6	-624010	-624010	0
8	27	7	-627886	-627886	0
8	27	8	-1666653	-1666653	0
8	27	9	-1179090	-1179090	0
8	27	10	-1901498	-1901498	0
8	27	11	-2390318	-2390318	0
8	27	12	-1424399	-1424399	0
8	27	13	-1981160	-1981160	0
8	27	14	-1130397	-1130397	0
8	27	15	-1244083	-1244083	0
8	27	16	-1312738	-1312738	0
8	27	17	-379290	-379290	0
8	27	18	0	0	0
8	27	19	0	0	0
8	27	20	0	0	0
8	27	21	0	0	0
8	27	22	0	0	0
8	27	23	0	0	0
8	28	0	0	0	0
8	28	1	0	0	0
8	28	2	0	0	0
8	28	3	0	0	0
8	28	4	0	0	0
8	28	5	-98442	-98442	0
8	28	6	-748320	-748320	0
8	28	7	-1245377	-1245377	0
8	28	8	-1890044	-1890044	0
8	28	9	-3265019	-3265019	0
8	28	10	-3688106	-3688106	0
8	28	11	-3098948	-3098948	0
8	28	12	-3849562	-3849562	0
8	28	13	-3528602	-3528602	0
8	28	14	-2986599	-2986599	0
8	28	15	-2227697	-2227697	0
8	28	16	-1283706	-1283706	0
8	28	17	-363467	-363467	0

8	28	18	0	0	0
8	28	19	0	0	0
8	28	20	0	0	0
8	28	21	0	0	0
8	28	22	0	0	0
8	28	23	0	0	0
8	29	0	0	0	0
8	29	1	0	0	0
8	29	2	0	0	0
8	29	3	0	0	0
8	29	4	0	0	0
8	29	5	-94603	-94603	0
8	29	6	-763969	-763969	0
8	29	7	-1815081	-1815081	0
8	29	8	-2753157	-2753157	0
8	29	9	-2469687	-2469687	0
8	29	10	-2374954	-2374954	0
8	29	11	-4081075	-3264860	-816215
8	29	12	-3980190	-3184152	-796038
8	29	13	-3676988	-3676988	0
8	29	14	-3152032	-3152032	0
8	29	15	-2343652	-2343652	0
8	29	16	-635812	-635812	0
8	29	17	-367274	-367274	0
8	29	18	0	0	0
8	29	19	0	0	0
8	29	20	0	0	0
8	29	21	0	0	0
8	29	22	0	0	0
8	29	23	0	0	0
8	30	0	0	0	0
8	30	1	0	0	0
8	30	2	0	0	0
8	30	3	0	0	0
8	30	4	0	0	0
8	30	5	-85830	-85830	0
8	30	6	-834174	-834174	0
8	30	7	-1711391	-1711391	0
8	30	8	-2553904	-2553904	0
8	30	9	-3216950	-3216950	0
8	30	10	-3121587	-3121587	0
8	30	11	-3504932	-3504932	0
8	30	12	-3679240	-3679240	0
8	30	13	-3261846	-3261846	0

8	30	14	-2242870	-2242870	0
8	30	15	-1697562	-1697562	0
8	30	16	-1143215	-1143215	0
8	30	17	-349063	-349063	0
8	30	18	0	0	0
8	30	19	0	0	0
8	30	20	0	0	0
8	30	21	0	0	0
8	30	22	0	0	0
8	30	23	0	0	0
8	31	0	0	0	0
8	31	1	0	0	0
8	31	2	0	0	0
8	31	3	0	0	0
8	31	4	0	0	0
8	31	5	-85900	-85900	0
8	31	6	-814686	-814686	0
8	31	7	-1962530	-1962530	0
8	31	8	-2952071	-2952071	0
8	31	9	-3662403	-3662403	0
8	31	10	-4091472	-3477751	-613721
8	31	11	-4255395	-3404316	-851079
8	31	12	-4157925	-4157925	0
8	31	13	-3479589	-3479589	0
8	31	14	-3260962	-3260962	0
8	31	15	-2330248	-2330248	0
8	31	16	-1223682	-1223682	0
8	31	17	-340439	-340439	0
8	31	18	0	0	0
8	31	19	0	0	0
8	31	20	0	0	0
8	31	21	0	0	0
8	31	22	0	0	0
8	31	23	0	0	0
9	1	0	0	0	0
9	1	1	0	0	0
9	1	2	0	0	0
9	1	3	0	0	0
9	1	4	0	0	0
9	1	5	-81543	-81543	0
9	1	6	-814725	-814725	0
9	1	7	-1973966	-1973966	0
9	1	8	-2977061	-2977061	0
9	1	9	-3690371	-3690371	0

9	1	10	-4131033	-3511378	-619655
9	1	11	-4295531	-3436425	-859106
9	1	12	-4220917	-3376734	-844183
9	1	13	-3872484	-3872484	0
9	1	14	-3277656	-3277656	0
9	1	15	-2402194	-2402194	0
9	1	16	-1329976	-1329976	0
9	1	17	-325986	-325986	0
9	1	18	0	0	0
9	1	19	0	0	0
9	1	20	0	0	0
9	1	21	0	0	0
9	1	22	0	0	0
9	1	23	0	0	0
9	2	0	0	0	0
9	2	1	0	0	0
9	2	2	0	0	0
9	2	3	0	0	0
9	2	4	0	0	0
9	2	5	-71962	-71962	0
9	2	6	-791625	-791625	0
9	2	7	-1926472	-1926472	0
9	2	8	-2906703	-2906703	0
9	2	9	-3633687	-3633687	0
9	2	10	-4071917	-3257534	-814383
9	2	11	-4234072	-3387258	-846814
9	2	12	-4155801	-4155801	0
9	2	13	-3799088	-3799088	0
9	2	14	-3227633	-3227633	0
9	2	15	-2358004	-2358004	0
9	2	16	-1289346	-1289346	0
9	2	17	-313806	-313806	0
9	2	18	0	0	0
9	2	19	0	0	0
9	2	20	0	0	0
9	2	21	0	0	0
9	2	22	0	0	0
9	2	23	0	0	0
9	3	0	0	0	0
9	3	1	0	0	0
9	3	2	0	0	0
9	3	3	0	0	0
9	3	4	0	0	0
9	3	5	-72716	-72716	0

9	3	6	-684911	-684911	0
9	3	7	-1772182	-1772182	0
9	3	8	-2670628	-2670628	0
9	3	9	-3249115	-3249115	0
9	3	10	-3331261	-3331261	0
9	3	11	-3034923	-3034923	0
9	3	12	-3088874	-3088874	0
9	3	13	-3878256	-3878256	0
9	3	14	-3247405	-3247405	0
9	3	15	-2390845	-2390845	0
9	3	16	-1307936	-1307936	0
9	3	17	-298106	-298106	0
9	3	18	0	0	0
9	3	19	0	0	0
9	3	20	0	0	0
9	3	21	0	0	0
9	3	22	0	0	0
9	3	23	0	0	0
9	4	0	0	0	0
9	4	1	0	0	0
9	4	2	0	0	0
9	4	3	0	0	0
9	4	4	0	0	0
9	4	5	-62628	-62628	0
9	4	6	-764858	-764858	0
9	4	7	-1882420	-1882420	0
9	4	8	-2847692	-2847692	0
9	4	9	-3543645	-3543645	0
9	4	10	-3991203	-3991203	0
9	4	11	-4164785	-4164785	0
9	4	12	-4061691	-4061691	0
9	4	13	-3693035	-3693035	0
9	4	14	-3117931	-3117931	0
9	4	15	-2262787	-2262787	0
9	4	16	-1206957	-1206957	0
9	4	17	-276651	-276651	0
9	4	18	0	0	0
9	4	19	0	0	0
9	4	20	0	0	0
9	4	21	0	0	0
9	4	22	0	0	0
9	4	23	0	0	0
9	5	0	0	0	0
9	5	1	0	0	0

9	5	2	0	0	0
9	5	3	0	0	0
9	5	4	0	0	0
9	5	5	-57369	-57369	0
9	5	6	-722959	-722959	0
9	5	7	-1793304	-1793304	0
9	5	8	-2729708	-2729708	0
9	5	9	-3426887	-3426887	0
9	5	10	-3849797	-3849797	0
9	5	11	-4008895	-4008895	0
9	5	12	-3908057	-3908057	0
9	5	13	-3574562	-3574562	0
9	5	14	-2978731	-2978731	0
9	5	15	-1355814	-1355814	0
9	5	16	-1143367	-1143367	0
9	5	17	-263214	-263214	0
9	5	18	0	0	0
9	5	19	0	0	0
9	5	20	0	0	0
9	5	21	0	0	0
9	5	22	0	0	0
9	5	23	0	0	0
9	6	0	0	0	0
9	6	1	0	0	0
9	6	2	0	0	0
9	6	3	0	0	0
9	6	4	0	0	0
9	6	5	-58217	-58217	0
9	6	6	-748223	-748223	0
9	6	7	-1879431	-1879431	0
9	6	8	-2889032	-2889032	0
9	6	9	-3608341	-3608341	0
9	6	10	-4071565	-3460831	-610735
9	6	11	-4244045	-3395236	-848809
9	6	12	-4169703	-3544247	-625455
9	6	13	-3806545	-3806545	0
9	6	14	-3221102	-3221102	0
9	6	15	-2341784	-2341784	0
9	6	16	-1244283	-1244283	0
9	6	17	-266436	-266436	0
9	6	18	0	0	0
9	6	19	0	0	0
9	6	20	0	0	0
9	6	21	0	0	0

9	6	22	0	0	0
9	6	23	0	0	0
9	7	0	0	0	0
9	7	1	0	0	0
9	7	2	0	0	0
9	7	3	0	0	0
9	7	4	0	0	0
9	7	5	-51273	-51273	0
9	7	6	-730766	-730766	0
9	7	7	-1540660	-1540660	0
9	7	8	-2469010	-2469010	0
9	7	9	-3008384	-3008384	0
9	7	10	-3197362	-3197362	0
9	7	11	-3065870	-3065870	0
9	7	12	-3264328	-3264328	0
9	7	13	-3011209	-3011209	0
9	7	14	-3058584	-3058584	0
9	7	15	-1708908	-1708908	0
9	7	16	-777470	-777470	0
9	7	17	-233019	-233019	0
9	7	18	0	0	0
9	7	19	0	0	0
9	7	20	0	0	0
9	7	21	0	0	0
9	7	22	0	0	0
9	7	23	0	0	0
9	8	0	0	0	0
9	8	1	0	0	0
9	8	2	0	0	0
9	8	3	0	0	0
9	8	4	0	0	0
9	8	5	-20556	-20556	0
9	8	6	-253676	-253676	0
9	8	7	-583404	-583404	0
9	8	8	-1173984	-1173984	0
9	8	9	-2817966	-2817966	0
9	8	10	-3385885	-3385885	0
9	8	11	-2977883	-2977883	0
9	8	12	-3103632	-3103632	0
9	8	13	-2887657	-2887657	0
9	8	14	-2526620	-2526620	0
9	8	15	-1477785	-1477785	0
9	8	16	-833201	-833201	0
9	8	17	-192269	-192269	0

9	8	18	0	0	0
9	8	19	0	0	0
9	8	20	0	0	0
9	8	21	0	0	0
9	8	22	0	0	0
9	8	23	0	0	0
9	9	0	0	0	0
9	9	1	0	0	0
9	9	2	0	0	0
9	9	3	0	0	0
9	9	4	0	0	0
9	9	5	-15204	-15204	0
9	9	6	-323499	-323499	0
9	9	7	-1111441	-1111441	0
9	9	8	-2136473	-2136473	0
9	9	9	-2629606	-2629606	0
9	9	10	-3322162	-3322162	0
9	9	11	-3434893	-3434893	0
9	9	12	-3748955	-3748955	0
9	9	13	-3559820	-3559820	0
9	9	14	-3047154	-3047154	0
9	9	15	-2133285	-2133285	0
9	9	16	-859023	-859023	0
9	9	17	-236682	-236682	0
9	9	18	0	0	0
9	9	19	0	0	0
9	9	20	0	0	0
9	9	21	0	0	0
9	9	22	0	0	0
9	9	23	0	0	0
9	10	0	0	0	0
9	10	1	0	0	0
9	10	2	0	0	0
9	10	3	0	0	0
9	10	4	0	0	0
9	10	5	0	0	0
9	10	6	-465033	-465033	0
9	10	7	-1567732	-1567732	0
9	10	8	-2287563	-2287563	0
9	10	9	-2697108	-2697108	0
9	10	10	-3718415	-3718415	0
9	10	11	-3538027	-3538027	0
9	10	12	-3797690	-3797690	0
9	10	13	-3557754	-3557754	0

9	10	14	-2688898	-2688898	0
9	10	15	-1899041	-1899041	0
9	10	16	-810222	-810222	0
9	10	17	-190124	-190124	0
9	10	18	0	0	0
9	10	19	0	0	0
9	10	20	0	0	0
9	10	21	0	0	0
9	10	22	0	0	0
9	10	23	0	0	0
9	11	0	0	0	0
9	11	1	0	0	0
9	11	2	0	0	0
9	11	3	0	0	0
9	11	4	0	0	0
9	11	5	0	0	0
9	11	6	-410795	-410795	0
9	11	7	-629111	-629111	0
9	11	8	-400036	-400036	0
9	11	9	-853606	-853606	0
9	11	10	-2592889	-2592889	0
9	11	11	-472755	-472755	0
9	11	12	-1097987	-1097987	0
9	11	13	-257558	-257558	0
9	11	14	-175799	-175799	0
9	11	15	-40361	-40361	0
9	11	16	-35492	-35492	0
9	11	17	-5068	-5068	0
9	11	18	0	0	0
9	11	19	0	0	0
9	11	20	0	0	0
9	11	21	0	0	0
9	11	22	0	0	0
9	11	23	0	0	0
9	12	0	0	0	0
9	12	1	0	0	0
9	12	2	0	0	0
9	12	3	0	0	0
9	12	4	0	0	0
9	12	5	0	0	0
9	12	6	-196151	-196151	0
9	12	7	-40143	-40143	0
9	12	8	-1012322	-1012322	0
9	12	9	-808537	-808537	0

9	12	10	-603269	-603269	0
9	12	11	-669547	-669547	0
9	12	12	-932523	-932523	0
9	12	13	-862541	-862541	0
9	12	14	-1257525	-1257525	0
9	12	15	-244448	-244448	0
9	12	16	-30063	-30063	0
9	12	17	-50436	-50436	0
9	12	18	0	0	0
9	12	19	0	0	0
9	12	20	0	0	0
9	12	21	0	0	0
9	12	22	0	0	0
9	12	23	0	0	0
9	13	0	0	0	0
9	13	1	0	0	0
9	13	2	0	0	0
9	13	3	0	0	0
9	13	4	0	0	0
9	13	5	0	0	0
9	13	6	-664190	-664190	0
9	13	7	-521093	-521093	0
9	13	8	-1330636	-1330636	0
9	13	9	-1572923	-1572923	0
9	13	10	-3871365	-3871365	0
9	13	11	-3975013	-3975013	0
9	13	12	-3887021	-3887021	0
9	13	13	-3541808	-3541808	0
9	13	14	-2920797	-2920797	0
9	13	15	-2059368	-2059368	0
9	13	16	-552924	-552924	0
9	13	17	-168548	-168548	0
9	13	18	0	0	0
9	13	19	0	0	0
9	13	20	0	0	0
9	13	21	0	0	0
9	13	22	0	0	0
9	13	23	0	0	0
9	14	0	0	0	0
9	14	1	0	0	0
9	14	2	0	0	0
9	14	3	0	0	0
9	14	4	0	0	0
9	14	5	0	0	0

9	14	6	-687297	-687297	0
9	14	7	-1804243	-1804243	0
9	14	8	-2795867	-2795867	0
9	14	9	-3492161	-3492161	0
9	14	10	-3924945	-3924945	0
9	14	11	-4066619	-4066619	0
9	14	12	-3958199	-3958199	0
9	14	13	-3627044	-3627044	0
9	14	14	-3004138	-3004138	0
9	14	15	-2122915	-2122915	0
9	14	16	-791213	-791213	0
9	14	17	-165077	-165077	0
9	14	18	0	0	0
9	14	19	0	0	0
9	14	20	0	0	0
9	14	21	0	0	0
9	14	22	0	0	0
9	14	23	0	0	0
9	15	0	0	0	0
9	15	1	0	0	0
9	15	2	0	0	0
9	15	3	0	0	0
9	15	4	0	0	0
9	15	5	0	0	0
9	15	6	-663038	-663038	0
9	15	7	-1763534	-1763534	0
9	15	8	-2745005	-2745005	0
9	15	9	-3464757	-3464757	0
9	15	10	-3877930	-3877930	0
9	15	11	-4031435	-3426720	-604715
9	15	12	-1945109	-1945109	0
9	15	13	-3632390	-3632390	0
9	15	14	-915061	-915061	0
9	15	15	-2099657	-2099657	0
9	15	16	-997283	-997283	0
9	15	17	-154812	-154812	0
9	15	18	0	0	0
9	15	19	0	0	0
9	15	20	0	0	0
9	15	21	0	0	0
9	15	22	0	0	0
9	15	23	0	0	0
9	16	0	0	0	0
9	16	1	0	0	0

9	16	2	0	0	0
9	16	3	0	0	0
9	16	4	0	0	0
9	16	5	0	0	0
9	16	6	-441330	-441330	0
9	16	7	-516141	-516141	0
9	16	8	-1667664	-1667664	0
9	16	9	-1156574	-1156574	0
9	16	10	-2140667	-2140667	0
9	16	11	-1524917	-1524917	0
9	16	12	-2405751	-2405751	0
9	16	13	-2698183	-2698183	0
9	16	14	-385655	-385655	0
9	16	15	-254492	-254492	0
9	16	16	-665181	-665181	0
9	16	17	-151733	-151733	0
9	16	18	0	0	0
9	16	19	0	0	0
9	16	20	0	0	0
9	16	21	0	0	0
9	16	22	0	0	0
9	16	23	0	0	0
9	17	0	0	0	0
9	17	1	0	0	0
9	17	2	0	0	0
9	17	3	0	0	0
9	17	4	0	0	0
9	17	5	0	0	0
9	17	6	-273926	-273926	0
9	17	7	-860060	-860060	0
9	17	8	-1254358	-1254358	0
9	17	9	-1915929	-1915929	0
9	17	10	-1431009	-1431009	0
9	17	11	-1695897	-1695897	0
9	17	12	-1606356	-1606356	0
9	17	13	-2774508	-2774508	0
9	17	14	-1487311	-1487311	0
9	17	15	-34628	-34628	0
9	17	16	-186872	-186872	0
9	17	17	-138322	-138322	0
9	17	18	0	0	0
9	17	19	0	0	0
9	17	20	0	0	0
9	17	21	0	0	0

9	17	22	0	0	0
9	17	23	0	0	0
9	18	0	0	0	0
9	18	1	0	0	0
9	18	2	0	0	0
9	18	3	0	0	0
9	18	4	0	0	0
9	18	5	0	0	0
9	18	6	-671503	-671503	0
9	18	7	-1807468	-1807468	0
9	18	8	-2812684	-2812684	0
9	18	9	-3528838	-3528838	0
9	18	10	-3993030	-3394075	-598954
9	18	11	-4131948	-3512156	-619792
9	18	12	-4000724	-3400615	-600109
9	18	13	-3580272	-3580272	0
9	18	14	-2914164	-2914164	0
9	18	15	-1996701	-1996701	0
9	18	16	-740648	-740648	0
9	18	17	-99243	-99243	0
9	18	18	0	0	0
9	18	19	0	0	0
9	18	20	0	0	0
9	18	21	0	0	0
9	18	22	0	0	0
9	18	23	0	0	0
9	19	0	0	0	0
9	19	1	0	0	0
9	19	2	0	0	0
9	19	3	0	0	0
9	19	4	0	0	0
9	19	5	0	0	0
9	19	6	-708873	-708873	0
9	19	7	-1936453	-1936453	0
9	19	8	-2995740	-2995740	0
9	19	9	-3735307	-2988245	-747061
9	19	10	-4185846	-3139385	-1046462
9	19	11	-4334249	-3250687	-1083562
9	19	12	-4196181	-3566754	-629427
9	19	13	-3788047	-3788047	0
9	19	14	-3114922	-3114922	0
9	19	15	-2177846	-2177846	0
9	19	16	-1016858	-1016858	0
9	19	17	-123565	-123565	0

9	19	18	0	0	0
9	19	19	0	0	0
9	19	20	0	0	0
9	19	21	0	0	0
9	19	22	0	0	0
9	19	23	0	0	0
9	20	0	0	0	0
9	20	1	0	0	0
9	20	2	0	0	0
9	20	3	0	0	0
9	20	4	0	0	0
9	20	5	0	0	0
9	20	6	-683011	-683011	0
9	20	7	-1887657	-1887657	0
9	20	8	-2913576	-2913576	0
9	20	9	-3623341	-2898673	-724668
9	20	10	-4065848	-3252678	-813170
9	20	11	-4209554	-3367643	-841911
9	20	12	-4078486	-3466713	-611773
9	20	13	-3691326	-3691326	0
9	20	14	-3024592	-3024592	0
9	20	15	-2101013	-2101013	0
9	20	16	-962070	-962070	0
9	20	17	-105773	-105773	0
9	20	18	0	0	0
9	20	19	0	0	0
9	20	20	0	0	0
9	20	21	0	0	0
9	20	22	0	0	0
9	20	23	0	0	0
9	21	0	0	0	0
9	21	1	0	0	0
9	21	2	0	0	0
9	21	3	0	0	0
9	21	4	0	0	0
9	21	5	0	0	0
9	21	6	-652335	-652335	0
9	21	7	-1841353	-1841353	0
9	21	8	-2873481	-2873481	0
9	21	9	-3580972	-3580972	0
9	21	10	-3997088	-3397525	-599563
9	21	11	-4140422	-3312338	-828084
9	21	12	-4007803	-3406632	-601170
9	21	13	-3656600	-3656600	0

9	21	14	-3000903	-3000903	0
9	21	15	-2058227	-2058227	0
9	21	16	-937931	-937931	0
9	21	17	-95972	-95972	0
9	21	18	0	0	0
9	21	19	0	0	0
9	21	20	0	0	0
9	21	21	0	0	0
9	21	22	0	0	0
9	21	23	0	0	0
9	22	0	0	0	0
9	22	1	0	0	0
9	22	2	0	0	0
9	22	3	0	0	0
9	22	4	0	0	0
9	22	5	0	0	0
9	22	6	-339808	-339808	0
9	22	7	-1392787	-1392787	0
9	22	8	-1939526	-1939526	0
9	22	9	-2620623	-2620623	0
9	22	10	-3131564	-3131564	0
9	22	11	-3025458	-3025458	0
9	22	12	-2389484	-2389484	0
9	22	13	-2192641	-2192641	0
9	22	14	-1402388	-1402388	0
9	22	15	-960045	-960045	0
9	22	16	-367550	-367550	0
9	22	17	-25001	-25001	0
9	22	18	0	0	0
9	22	19	0	0	0
9	22	20	0	0	0
9	22	21	0	0	0
9	22	22	0	0	0
9	22	23	0	0	0
9	23	0	0	0	0
9	23	1	0	0	0
9	23	2	0	0	0
9	23	3	0	0	0
9	23	4	0	0	0
9	23	5	0	0	0
9	23	6	-59949	-59949	0
9	23	7	-671642	-671642	0
9	23	8	-835114	-835114	0
9	23	9	-1203303	-1203303	0

9	23	10	-1343135	-1343135	0
9	23	11	-1719320	-1719320	0
9	23	12	-2819919	-2819919	0
9	23	13	-2612443	-2612443	0
9	23	14	-2177750	-2177750	0
9	23	15	-461099	-461099	0
9	23	16	-573713	-573713	0
9	23	17	-29480	-29480	0
9	23	18	0	0	0
9	23	19	0	0	0
9	23	20	0	0	0
9	23	21	0	0	0
9	23	22	0	0	0
9	23	23	0	0	0
9	24	0	0	0	0
9	24	1	0	0	0
9	24	2	0	0	0
9	24	3	0	0	0
9	24	4	0	0	0
9	24	5	0	0	0
9	24	6	-310231	-310231	0
9	24	7	-1540955	-1540955	0
9	24	8	-2519176	-2519176	0
9	24	9	-3241989	-3241989	0
9	24	10	-3701210	-3701210	0
9	24	11	-1760542	-1760542	0
9	24	12	-2671110	-2671110	0
9	24	13	-2573127	-2573127	0
9	24	14	-665487	-665487	0
9	24	15	-1755355	-1755355	0
9	24	16	-482784	-482784	0
9	24	17	0	0	0
9	24	18	0	0	0
9	24	19	0	0	0
9	24	20	0	0	0
9	24	21	0	0	0
9	24	22	0	0	0
9	24	23	0	0	0
9	25	0	0	0	0
9	25	1	0	0	0
9	25	2	0	0	0
9	25	3	0	0	0
9	25	4	0	0	0
9	25	5	0	0	0

9	25	6	-621382	-621382	0
9	25	7	-1829256	-1829256	0
9	25	8	-2898753	-2898753	0
9	25	9	-3666285	-3666285	0
9	25	10	-4108961	-3492617	-616344
9	25	11	-4243244	-3606757	-636487
9	25	12	-4111053	-4111053	0
9	25	13	-3697003	-3697003	0
9	25	14	-1037621	-1037621	0
9	25	15	-2076685	-2076685	0
9	25	16	-874302	-874302	0
9	25	17	0	0	0
9	25	18	0	0	0
9	25	19	0	0	0
9	25	20	0	0	0
9	25	21	0	0	0
9	25	22	0	0	0
9	25	23	0	0	0
9	26	0	0	0	0
9	26	1	0	0	0
9	26	2	0	0	0
9	26	3	0	0	0
9	26	4	0	0	0
9	26	5	0	0	0
9	26	6	-646634	-646634	0
9	26	7	-1866488	-1866488	0
9	26	8	-2943612	-2943612	0
9	26	9	-3669578	-3669578	0
9	26	10	-4113076	-3496115	-616961
9	26	11	-4252888	-3614955	-637933
9	26	12	-4125812	-3506940	-618872
9	26	13	-3715414	-3715414	0
9	26	14	-3038061	-3038061	0
9	26	15	-2044705	-2044705	0
9	26	16	-729287	-729287	0
9	26	17	0	0	0
9	26	18	0	0	0
9	26	19	0	0	0
9	26	20	0	0	0
9	26	21	0	0	0
9	26	22	0	0	0
9	26	23	0	0	0
9	27	0	0	0	0
9	27	1	0	0	0

9	27	2	0	0	0
9	27	3	0	0	0
9	27	4	0	0	0
9	27	5	0	0	0
9	27	6	-25466	-25466	0
9	27	7	-71296	-71296	0
9	27	8	-431489	-431489	0
9	27	9	-392643	-392643	0
9	27	10	-1582693	-1582693	0
9	27	11	-376204	-376204	0
9	27	12	-562969	-562969	0
9	27	13	-507528	-507528	0
9	27	14	-443940	-443940	0
9	27	15	-736045	-736045	0
9	27	16	-84488	-84488	0
9	27	17	0	0	0
9	27	18	0	0	0
9	27	19	0	0	0
9	27	20	0	0	0
9	27	21	0	0	0
9	27	22	0	0	0
9	27	23	0	0	0
9	28	0	0	0	0
9	28	1	0	0	0
9	28	2	0	0	0
9	28	3	0	0	0
9	28	4	0	0	0
9	28	5	0	0	0
9	28	6	-549879	-549879	0
9	28	7	-1662351	-1662351	0
9	28	8	-2664485	-2664485	0
9	28	9	-3361056	-3361056	0
9	28	10	-3820705	-3056564	-764141
9	28	11	-3963451	-3170761	-792690
9	28	12	-3813757	-3813757	0
9	28	13	-3421919	-3421919	0
9	28	14	-2720620	-2720620	0
9	28	15	-1733989	-1733989	0
9	28	16	-657019	-657019	0
9	28	17	0	0	0
9	28	18	0	0	0
9	28	19	0	0	0
9	28	20	0	0	0
9	28	21	0	0	0

9	28	22	0	0	0
9	28	23	0	0	0
9	29	0	0	0	0
9	29	1	0	0	0
9	29	2	0	0	0
9	29	3	0	0	0
9	29	4	0	0	0
9	29	5	0	0	0
9	29	6	-564413	-564413	0
9	29	7	-1706010	-1706010	0
9	29	8	-2744212	-2744212	0
9	29	9	-3500736	-3500736	0
9	29	10	-3922746	-3138197	-784549
9	29	11	-4045669	-3236535	-809134
9	29	12	-3915844	-3915844	0
9	29	13	-2589736	-2589736	0
9	29	14	-2738190	-2738190	0
9	29	15	-549535	-549535	0
9	29	16	-105540	-105540	0
9	29	17	0	0	0
9	29	18	0	0	0
9	29	19	0	0	0
9	29	20	0	0	0
9	29	21	0	0	0
9	29	22	0	0	0
9	29	23	0	0	0
9	30	0	0	0	0
9	30	1	0	0	0
9	30	2	0	0	0
9	30	3	0	0	0
9	30	4	0	0	0
9	30	5	0	0	0
9	30	6	-144407	-144407	0
9	30	7	-409973	-409973	0
9	30	8	-788996	-788996	0
9	30	9	-2833497	-2833497	0
9	30	10	-3944281	-3352639	-591642
9	30	11	-2286244	-2286244	0
9	30	12	-2365618	-2365618	0
9	30	13	-1223772	-1223772	0
9	30	14	-2045605	-2045605	0
9	30	15	-766738	-766738	0
9	30	16	-596313	-596313	0
9	30	17	0	0	0

9	30	18	0	0	0
9	30	19	0	0	0
9	30	20	0	0	0
9	30	21	0	0	0
9	30	22	0	0	0
9	30	23	0	0	0
10	1	0	0	0	0
10	1	1	0	0	0
10	1	2	0	0	0
10	1	3	0	0	0
10	1	4	0	0	0
10	1	5	0	0	0
10	1	6	-70929	-70929	0
10	1	7	-190989	-190989	0
10	1	8	-1049787	-1049787	0
10	1	9	-118218	-118218	0
10	1	10	-741869	-741869	0
10	1	11	-906658	-906658	0
10	1	12	-1341710	-1341710	0
10	1	13	-2273499	-2273499	0
10	1	14	-1623704	-1623704	0
10	1	15	-1760235	-1760235	0
10	1	16	-657033	-657033	0
10	1	17	0	0	0
10	1	18	0	0	0
10	1	19	0	0	0
10	1	20	0	0	0
10	1	21	0	0	0
10	1	22	0	0	0
10	1	23	0	0	0
10	2	0	0	0	0
10	2	1	0	0	0
10	2	2	0	0	0
10	2	3	0	0	0
10	2	4	0	0	0
10	2	5	0	0	0
10	2	6	-30556	-30556	0
10	2	7	-1618697	-1618697	0
10	2	8	-2636500	-2636500	0
10	2	9	-807195	-807195	0
10	2	10	-959493	-959493	0
10	2	11	-1587946	-1587946	0
10	2	12	-475509	-475509	0
10	2	13	-1240158	-1240158	0

10	2	14	-2783027	-2783027	0
10	2	15	-1777147	-1777147	0
10	2	16	-664722	-664722	0
10	2	17	0	0	0
10	2	18	0	0	0
10	2	19	0	0	0
10	2	20	0	0	0
10	2	21	0	0	0
10	2	22	0	0	0
10	2	23	0	0	0
10	3	0	0	0	0
10	3	1	0	0	0
10	3	2	0	0	0
10	3	3	0	0	0
10	3	4	0	0	0
10	3	5	0	0	0
10	3	6	-247432	-247432	0
10	3	7	-1683836	-1683836	0
10	3	8	-1173022	-1173022	0
10	3	9	-1494483	-1494483	0
10	3	10	-551817	-551817	0
10	3	11	-4120816	-3296653	-824163
10	3	12	-3887309	-3887309	0
10	3	13	-755883	-755883	0
10	3	14	-213634	-213634	0
10	3	15	-848000	-848000	0
10	3	16	-559846	-559846	0
10	3	17	0	0	0
10	3	18	0	0	0
10	3	19	0	0	0
10	3	20	0	0	0
10	3	21	0	0	0
10	3	22	0	0	0
10	3	23	0	0	0
10	4	0	0	0	0
10	4	1	0	0	0
10	4	2	0	0	0
10	4	3	0	0	0
10	4	4	0	0	0
10	4	5	0	0	0
10	4	6	-114030	-114030	0
10	4	7	-931953	-931953	0
10	4	8	-1575831	-1575831	0
10	4	9	-2062607	-2062607	0

10	4	10	-2348139	-2348139	0
10	4	11	-2437269	-2437269	0
10	4	12	-3012928	-3012928	0
10	4	13	-2623675	-2623675	0
10	4	14	-2043924	-2043924	0
10	4	15	-836052	-836052	0
10	4	16	-307404	-307404	0
10	4	17	0	0	0
10	4	18	0	0	0
10	4	19	0	0	0
10	4	20	0	0	0
10	4	21	0	0	0
10	4	22	0	0	0
10	4	23	0	0	0
10	5	0	0	0	0
10	5	1	0	0	0
10	5	2	0	0	0
10	5	3	0	0	0
10	5	4	0	0	0
10	5	5	0	0	0
10	5	6	-510761	-510761	0
10	5	7	-1630140	-1630140	0
10	5	8	-2664323	-2664323	0
10	5	9	-3413705	-2901649	-512056
10	5	10	-3871957	-2710370	-1161587
10	5	11	-3994002	-3394902	-599100
10	5	12	-3868655	-3094924	-773731
10	5	13	-3161337	-3161337	0
10	5	14	-1207879	-1207879	0
10	5	15	-1816497	-1816497	0
10	5	16	-630667	-630667	0
10	5	17	0	0	0
10	5	18	0	0	0
10	5	19	0	0	0
10	5	20	0	0	0
10	5	21	0	0	0
10	5	22	0	0	0
10	5	23	0	0	0
10	6	0	0	0	0
10	6	1	0	0	0
10	6	2	0	0	0
10	6	3	0	0	0
10	6	4	0	0	0
10	6	5	0	0	0

10	6	6	-551526	-551526	0
10	6	7	-1198755	-1198755	0
10	6	8	-2872375	-2872375	0
10	6	9	-3639857	-3093878	-545979
10	6	10	-4042769	-3234215	-808554
10	6	11	-4176956	-3341565	-835391
10	6	12	-4012150	-3410328	-601823
10	6	13	-3568465	-3568465	0
10	6	14	-2842115	-2842115	0
10	6	15	-1816507	-1816507	0
10	6	16	-633264	-633264	0
10	6	17	0	0	0
10	6	18	0	0	0
10	6	19	0	0	0
10	6	20	0	0	0
10	6	21	0	0	0
10	6	22	0	0	0
10	6	23	0	0	0
10	7	0	0	0	0
10	7	1	0	0	0
10	7	2	0	0	0
10	7	3	0	0	0
10	7	4	0	0	0
10	7	5	0	0	0
10	7	6	-385222	-385222	0
10	7	7	-1701638	-1701638	0
10	7	8	-2741461	-2741461	0
10	7	9	-3496929	-3496929	0
10	7	10	-3894973	-3115978	-778995
10	7	11	-4019841	-3215873	-803968
10	7	12	-3869961	-3289467	-580494
10	7	13	-3429963	-3429963	0
10	7	14	-2689768	-2689768	0
10	7	15	-1695418	-1695418	0
10	7	16	-570047	-570047	0
10	7	17	0	0	0
10	7	18	0	0	0
10	7	19	0	0	0
10	7	20	0	0	0
10	7	21	0	0	0
10	7	22	0	0	0
10	7	23	0	0	0
10	8	0	0	0	0
10	8	1	0	0	0

10	8	2	0	0	0
10	8	3	0	0	0
10	8	4	0	0	0
10	8	5	0	0	0
10	8	6	-444931	-444931	0
10	8	7	-1551764	-1551764	0
10	8	8	-2559136	-2559136	0
10	8	9	-3260633	-3260633	0
10	8	10	-3664484	-3114811	-549673
10	8	11	-3797105	-3227539	-569566
10	8	12	-3652791	-3652791	0
10	8	13	-3239303	-3239303	0
10	8	14	-2562523	-2562523	0
10	8	15	-1597053	-1597053	0
10	8	16	-521261	-521261	0
10	8	17	0	0	0
10	8	18	0	0	0
10	8	19	0	0	0
10	8	20	0	0	0
10	8	21	0	0	0
10	8	22	0	0	0
10	8	23	0	0	0
10	9	0	0	0	0
10	9	1	0	0	0
10	9	2	0	0	0
10	9	3	0	0	0
10	9	4	0	0	0
10	9	5	0	0	0
10	9	6	-460293	-460293	0
10	9	7	-1600424	-1600424	0
10	9	8	-2606541	-2606541	0
10	9	9	-3298468	-3298468	0
10	9	10	-3679906	-3679906	0
10	9	11	-3802886	-3232453	-570433
10	9	12	-3642183	-3642183	0
10	9	13	-3231857	-3231857	0
10	9	14	-2536020	-2536020	0
10	9	15	-1576318	-1576318	0
10	9	16	-497074	-497074	0
10	9	17	0	0	0
10	9	18	0	0	0
10	9	19	0	0	0
10	9	20	0	0	0
10	9	21	0	0	0

10	9	22	0	0	0
10	9	23	0	0	0
10	10	0	0	0	0
10	10	1	0	0	0
10	10	2	0	0	0
10	10	3	0	0	0
10	10	4	0	0	0
10	10	5	0	0	0
10	10	6	-446477	-446477	0
10	10	7	-1596554	-1596554	0
10	10	8	-2612132	-2612132	0
10	10	9	-3307227	-3307227	0
10	10	10	-3670592	-3670592	0
10	10	11	-3781338	-3781338	0
10	10	12	-3655556	-3655556	0
10	10	13	-3203160	-3203160	0
10	10	14	-2502434	-2502434	0
10	10	15	-1187388	-1187388	0
10	10	16	-485159	-485159	0
10	10	17	0	0	0
10	10	18	0	0	0
10	10	19	0	0	0
10	10	20	0	0	0
10	10	21	0	0	0
10	10	22	0	0	0
10	10	23	0	0	0
10	11	0	0	0	0
10	11	1	0	0	0
10	11	2	0	0	0
10	11	3	0	0	0
10	11	4	0	0	0
10	11	5	0	0	0
10	11	6	-206059	-206059	0
10	11	7	-1517076	-1517076	0
10	11	8	-2290104	-2290104	0
10	11	9	-3035309	-3035309	0
10	11	10	-3231586	-3231586	0
10	11	11	-3545397	-3545397	0
10	11	12	-3238837	-3238837	0
10	11	13	-2920794	-2920794	0
10	11	14	-2401819	-2401819	0
10	11	15	-1487351	-1487351	0
10	11	16	-457879	-457879	0
10	11	17	0	0	0

10	11	18	0	0	0
10	11	19	0	0	0
10	11	20	0	0	0
10	11	21	0	0	0
10	11	22	0	0	0
10	11	23	0	0	0
10	12	0	0	0	0
10	12	1	0	0	0
10	12	2	0	0	0
10	12	3	0	0	0
10	12	4	0	0	0
10	12	5	0	0	0
10	12	6	-171137	-171137	0
10	12	7	-872486	-872486	0
10	12	8	-1281439	-1281439	0
10	12	9	-1924332	-1924332	0
10	12	10	-1793314	-1793314	0
10	12	11	-1813250	-1813250	0
10	12	12	-2300505	-2300505	0
10	12	13	-1949913	-1949913	0
10	12	14	-1141884	-1141884	0
10	12	15	-407677	-407677	0
10	12	16	-160555	-160555	0
10	12	17	0	0	0
10	12	18	0	0	0
10	12	19	0	0	0
10	12	20	0	0	0
10	12	21	0	0	0
10	12	22	0	0	0
10	12	23	0	0	0
10	13	0	0	0	0
10	13	1	0	0	0
10	13	2	0	0	0
10	13	3	0	0	0
10	13	4	0	0	0
10	13	5	0	0	0
10	13	6	-117657	-117657	0
10	13	7	-86830	-86830	0
10	13	8	-353455	-353455	0
10	13	9	-903381	-903381	0
10	13	10	-947621	-947621	0
10	13	11	-1345304	-1345304	0
10	13	12	-1415449	-1415449	0
10	13	13	-797666	-797666	0

10	13	14	-2454239	-2454239	0
10	13	15	-1442028	-1442028	0
10	13	16	-396809	-396809	0
10	13	17	0	0	0
10	13	18	0	0	0
10	13	19	0	0	0
10	13	20	0	0	0
10	13	21	0	0	0
10	13	22	0	0	0
10	13	23	0	0	0
10	14	0	0	0	0
10	14	1	0	0	0
10	14	2	0	0	0
10	14	3	0	0	0
10	14	4	0	0	0
10	14	5	0	0	0
10	14	6	-101361	-101361	0
10	14	7	-312131	-312131	0
10	14	8	-656585	-656585	0
10	14	9	-563536	-563536	0
10	14	10	-1208873	-1208873	0
10	14	11	-779337	-779337	0
10	14	12	-832605	-832605	0
10	14	13	-715480	-715480	0
10	14	14	-702050	-702050	0
10	14	15	-974100	-974100	0
10	14	16	-383414	-383414	0
10	14	17	0	0	0
10	14	18	0	0	0
10	14	19	0	0	0
10	14	20	0	0	0
10	14	21	0	0	0
10	14	22	0	0	0
10	14	23	0	0	0
10	15	0	0	0	0
10	15	1	0	0	0
10	15	2	0	0	0
10	15	3	0	0	0
10	15	4	0	0	0
10	15	5	0	0	0
10	15	6	-389434	-389434	0
10	15	7	-1468625	-1468625	0
10	15	8	-2520554	-2520554	0
10	15	9	-3272061	-3272061	0

10	15	10	-3130006	-3130006	0
10	15	11	-3099195	-3099195	0
10	15	12	-2521134	-2521134	0
10	15	13	-2181496	-2181496	0
10	15	14	-2448953	-2448953	0
10	15	15	-14802	-14802	0
10	15	16	-293831	-293831	0
10	15	17	0	0	0
10	15	18	0	0	0
10	15	19	0	0	0
10	15	20	0	0	0
10	15	21	0	0	0
10	15	22	0	0	0
10	15	23	0	0	0
10	16	0	0	0	0
10	16	1	0	0	0
10	16	2	0	0	0
10	16	3	0	0	0
10	16	4	0	0	0
10	16	5	0	0	0
10	16	6	-381208	-381208	0
10	16	7	-1524510	-1524510	0
10	16	8	-2603969	-2603969	0
10	16	9	-3363220	-3363220	0
10	16	10	-3783341	-3215839	-567501
10	16	11	-3900105	-3120084	-780021
10	16	12	-1946803	-1946803	0
10	16	13	-1649206	-1649206	0
10	16	14	-820906	-820906	0
10	16	15	-1075539	-1075539	0
10	16	16	-390029	-390029	0
10	16	17	0	0	0
10	16	18	0	0	0
10	16	19	0	0	0
10	16	20	0	0	0
10	16	21	0	0	0
10	16	22	0	0	0
10	16	23	0	0	0
10	17	0	0	0	0
10	17	1	0	0	0
10	17	2	0	0	0
10	17	3	0	0	0
10	17	4	0	0	0
10	17	5	0	0	0

10	17	6	-159490	-159490	0
10	17	7	-1518176	-1518176	0
10	17	8	-2648234	-2648234	0
10	17	9	-3419633	-3419633	0
10	17	10	-3860191	-3088153	-772038
10	17	11	-4001178	-3200943	-800236
10	17	12	-3819257	-3246369	-572889
10	17	13	-3343318	-3343318	0
10	17	14	-2586128	-2586128	0
10	17	15	-1532624	-1532624	0
10	17	16	-405131	-405131	0
10	17	17	0	0	0
10	17	18	0	0	0
10	17	19	0	0	0
10	17	20	0	0	0
10	17	21	0	0	0
10	17	22	0	0	0
10	17	23	0	0	0
10	18	0	0	0	0
10	18	1	0	0	0
10	18	2	0	0	0
10	18	3	0	0	0
10	18	4	0	0	0
10	18	5	0	0	0
10	18	6	-149195	-149195	0
10	18	7	-403326	-403326	0
10	18	8	-318504	-318504	0
10	18	9	-1216398	-1216398	0
10	18	10	-3022099	-3022099	0
10	18	11	-3700216	-3700216	0
10	18	12	-3551754	-3551754	0
10	18	13	-3122846	-3122846	0
10	18	14	-2384707	-2384707	0
10	18	15	-858380	-858380	0
10	18	16	-185991	-185991	0
10	18	17	0	0	0
10	18	18	0	0	0
10	18	19	0	0	0
10	18	20	0	0	0
10	18	21	0	0	0
10	18	22	0	0	0
10	18	23	0	0	0
10	19	0	0	0	0
10	19	1	0	0	0

10	19	2	0	0	0
10	19	3	0	0	0
10	19	4	0	0	0
10	19	5	0	0	0
10	19	6	-82436	-82436	0
10	19	7	-46240	-46240	0
10	19	8	-30741	-30741	0
10	19	9	-101894	-101894	0
10	19	10	-651496	-651496	0
10	19	11	-210371	-210371	0
10	19	12	-430092	-430092	0
10	19	13	-676239	-676239	0
10	19	14	-269525	-269525	0
10	19	15	-583864	-583864	0
10	19	16	-335377	-335377	0
10	19	17	0	0	0
10	19	18	0	0	0
10	19	19	0	0	0
10	19	20	0	0	0
10	19	21	0	0	0
10	19	22	0	0	0
10	19	23	0	0	0
10	20	0	0	0	0
10	20	1	0	0	0
10	20	2	0	0	0
10	20	3	0	0	0
10	20	4	0	0	0
10	20	5	0	0	0
10	20	6	-225496	-225496	0
10	20	7	-338672	-338672	0
10	20	8	-100003	-100003	0
10	20	9	-3123292	-3123292	0
10	20	10	-3587572	-2870058	-717514
10	20	11	-3764681	-3011745	-752936
10	20	12	-2942801	-2942801	0
10	20	13	-2601671	-2601671	0
10	20	14	-2428231	-2428231	0
10	20	15	-1351469	-1351469	0
10	20	16	-298043	-298043	0
10	20	17	0	0	0
10	20	18	0	0	0
10	20	19	0	0	0
10	20	20	0	0	0
10	20	21	0	0	0

10	20	22	0	0	0
10	20	23	0	0	0
10	21	0	0	0	0
10	21	1	0	0	0
10	21	2	0	0	0
10	21	3	0	0	0
10	21	4	0	0	0
10	21	5	0	0	0
10	21	6	-342291	-342291	0
10	21	7	-860615	-860615	0
10	21	8	-2557080	-2557080	0
10	21	9	-3303293	-3303293	0
10	21	10	-3717064	-2973651	-743413
10	21	11	-3855386	-3084309	-771077
10	21	12	-3689898	-3689898	0
10	21	13	-3231512	-3231512	0
10	21	14	-2461679	-2461679	0
10	21	15	-1411841	-1411841	0
10	21	16	-332160	-332160	0
10	21	17	0	0	0
10	21	18	0	0	0
10	21	19	0	0	0
10	21	20	0	0	0
10	21	21	0	0	0
10	21	22	0	0	0
10	21	23	0	0	0
10	22	0	0	0	0
10	22	1	0	0	0
10	22	2	0	0	0
10	22	3	0	0	0
10	22	4	0	0	0
10	22	5	0	0	0
10	22	6	-320911	-320911	0
10	22	7	-1438873	-1438873	0
10	22	8	-2513205	-2513205	0
10	22	9	-3257471	-3257471	0
10	22	10	-3692014	-3692014	0
10	22	11	-2931691	-2931691	0
10	22	12	-1695506	-1695506	0
10	22	13	-1918185	-1918185	0
10	22	14	-802561	-802561	0
10	22	15	-312010	-312010	0
10	22	16	-56863	-56863	0
10	22	17	0	0	0

10	22	18	0	0	0
10	22	19	0	0	0
10	22	20	0	0	0
10	22	21	0	0	0
10	22	22	0	0	0
10	22	23	0	0	0
10	23	0	0	0	0
10	23	1	0	0	0
10	23	2	0	0	0
10	23	3	0	0	0
10	23	4	0	0	0
10	23	5	0	0	0
10	23	6	-74233	-74233	0
10	23	7	-1461830	-1461830	0
10	23	8	-2537250	-2537250	0
10	23	9	-1257364	-1257364	0
10	23	10	-1601147	-1601147	0
10	23	11	-2063905	-2063905	0
10	23	12	-1946274	-1946274	0
10	23	13	-3232579	-3232579	0
10	23	14	-2420923	-2420923	0
10	23	15	-1018592	-1018592	0
10	23	16	-184561	-184561	0
10	23	17	0	0	0
10	23	18	0	0	0
10	23	19	0	0	0
10	23	20	0	0	0
10	23	21	0	0	0
10	23	22	0	0	0
10	23	23	0	0	0
10	24	0	0	0	0
10	24	1	0	0	0
10	24	2	0	0	0
10	24	3	0	0	0
10	24	4	0	0	0
10	24	5	0	0	0
10	24	6	-262084	-262084	0
10	24	7	-810418	-810418	0
10	24	8	-1923780	-1923780	0
10	24	9	-2988578	-2988578	0
10	24	10	-2720845	-2720845	0
10	24	11	-2503259	-2503259	0
10	24	12	-2603258	-2603258	0
10	24	13	-1693582	-1693582	0

10	24	14	-1863174	-1863174	0
10	24	15	-782753	-782753	0
10	24	16	-92346	-92346	0
10	24	17	0	0	0
10	24	18	0	0	0
10	24	19	0	0	0
10	24	20	0	0	0
10	24	21	0	0	0
10	24	22	0	0	0
10	24	23	0	0	0
10	25	0	0	0	0
10	25	1	0	0	0
10	25	2	0	0	0
10	25	3	0	0	0
10	25	4	0	0	0
10	25	5	0	0	0
10	25	6	-305682	-305682	0
10	25	7	-1431411	-1431411	0
10	25	8	-2529606	-2529606	0
10	25	9	-3314095	-3314095	0
10	25	10	-3743300	-2807475	-935825
10	25	11	-3870864	-3290234	-580630
10	25	12	-3710106	-3153590	-556516
10	25	13	-3256382	-3256382	0
10	25	14	-2468206	-2468206	0
10	25	15	-1388922	-1388922	0
10	25	16	-295080	-295080	0
10	25	17	0	0	0
10	25	18	0	0	0
10	25	19	0	0	0
10	25	20	0	0	0
10	25	21	0	0	0
10	25	22	0	0	0
10	25	23	0	0	0
10	26	0	0	0	0
10	26	1	0	0	0
10	26	2	0	0	0
10	26	3	0	0	0
10	26	4	0	0	0
10	26	5	0	0	0
10	26	6	-47527	-47527	0
10	26	7	-307931	-307931	0
10	26	8	-612913	-612913	0
10	26	9	-803046	-803046	0

10	26	10	-581520	-581520	0
10	26	11	-1166213	-1166213	0
10	26	12	-1355831	-1355831	0
10	26	13	-266155	-266155	0
10	26	14	-569420	-569420	0
10	26	15	-214478	-214478	0
10	26	16	-25878	-25878	0
10	26	17	0	0	0
10	26	18	0	0	0
10	26	19	0	0	0
10	26	20	0	0	0
10	26	21	0	0	0
10	26	22	0	0	0
10	26	23	0	0	0
10	27	0	0	0	0
10	27	1	0	0	0
10	27	2	0	0	0
10	27	3	0	0	0
10	27	4	0	0	0
10	27	5	0	0	0
10	27	6	-26399	-26399	0
10	27	7	-147602	-147602	0
10	27	8	-147440	-147440	0
10	27	9	-262556	-262556	0
10	27	10	-473908	-473908	0
10	27	11	-612578	-612578	0
10	27	12	-644463	-644463	0
10	27	13	-406255	-406255	0
10	27	14	-357469	-357469	0
10	27	15	-186048	-186048	0
10	27	16	-16025	-16025	0
10	27	17	0	0	0
10	27	18	0	0	0
10	27	19	0	0	0
10	27	20	0	0	0
10	27	21	0	0	0
10	27	22	0	0	0
10	27	23	0	0	0
10	28	0	0	0	0
10	28	1	0	0	0
10	28	2	0	0	0
10	28	3	0	0	0
10	28	4	0	0	0
10	28	5	0	0	0

10	28	6	-309608	-309608	0
10	28	7	-1505121	-1505121	0
10	28	8	-2651086	-2651086	0
10	28	9	-3444488	-3444488	0
10	28	10	-3904390	-3318731	-585658
10	28	11	-4033943	-3428852	-605092
10	28	12	-3834098	-3834098	0
10	28	13	-3321092	-3321092	0
10	28	14	-2511136	-2511136	0
10	28	15	-1371749	-1371749	0
10	28	16	-112816	-112816	0
10	28	17	0	0	0
10	28	18	0	0	0
10	28	19	0	0	0
10	28	20	0	0	0
10	28	21	0	0	0
10	28	22	0	0	0
10	28	23	0	0	0
10	29	0	0	0	0
10	29	1	0	0	0
10	29	2	0	0	0
10	29	3	0	0	0
10	29	4	0	0	0
10	29	5	0	0	0
10	29	6	-37901	-37901	0
10	29	7	-134744	-134744	0
10	29	8	-357185	-357185	0
10	29	9	-595832	-595832	0
10	29	10	-299562	-299562	0
10	29	11	-180323	-180323	0
10	29	12	-407800	-407800	0
10	29	13	-160289	-160289	0
10	29	14	-59322	-59322	0
10	29	15	-253682	-253682	0
10	29	16	-26926	-26926	0
10	29	17	0	0	0
10	29	18	0	0	0
10	29	19	0	0	0
10	29	20	0	0	0
10	29	21	0	0	0
10	29	22	0	0	0
10	29	23	0	0	0
10	30	0	0	0	0
10	30	1	0	0	0

10	30	2	0	0	0
10	30	3	0	0	0
10	30	4	0	0	0
10	30	5	0	0	0
10	30	6	-217137	-217137	0
10	30	7	-1383399	-1383399	0
10	30	8	-2535050	-2535050	0
10	30	9	-3367783	-3367783	0
10	30	10	-3787822	-3787822	0
10	30	11	-3939363	-3939363	0
10	30	12	-2952877	-2952877	0
10	30	13	-2604393	-2604393	0
10	30	14	-2451376	-2451376	0
10	30	15	-1338791	-1338791	0
10	30	16	-206392	-206392	0
10	30	17	0	0	0
10	30	18	0	0	0
10	30	19	0	0	0
10	30	20	0	0	0
10	30	21	0	0	0
10	30	22	0	0	0
10	30	23	0	0	0
10	31	0	0	0	0
10	31	1	0	0	0
10	31	2	0	0	0
10	31	3	0	0	0
10	31	4	0	0	0
10	31	5	0	0	0
10	31	6	-192797	-192797	0
10	31	7	-1292767	-1292767	0
10	31	8	-2423784	-2423784	0
10	31	9	-3201164	-3201164	0
10	31	10	-2571726	-2571726	0
10	31	11	-3001068	-3001068	0
10	31	12	-2599108	-2599108	0
10	31	13	-2516375	-2516375	0
10	31	14	-1562153	-1562153	0
10	31	15	-491521	-491521	0
10	31	16	-31645	-31645	0
10	31	17	0	0	0
10	31	18	0	0	0
10	31	19	0	0	0
10	31	20	0	0	0
10	31	21	0	0	0

10	31	22	0	0	0
10	31	23	0	0	0
11	1	0	0	0	0
11	1	1	0	0	0
11	1	2	0	0	0
11	1	3	0	0	0
11	1	4	0	0	0
11	1	5	0	0	0
11	1	6	-10467	-10467	0
11	1	7	-268691	-268691	0
11	1	8	-272692	-272692	0
11	1	9	-281624	-281624	0
11	1	10	-340820	-340820	0
11	1	11	-712632	-712632	0
11	1	12	-1394688	-1394688	0
11	1	13	-1217593	-1217593	0
11	1	14	-945529	-945529	0
11	1	15	-255174	-255174	0
11	1	16	0	0	0
11	1	17	0	0	0
11	1	18	0	0	0
11	1	19	0	0	0
11	1	20	0	0	0
11	1	21	0	0	0
11	1	22	0	0	0
11	1	23	0	0	0
11	2	0	0	0	0
11	2	1	0	0	0
11	2	2	0	0	0
11	2	3	0	0	0
11	2	4	0	0	0
11	2	5	0	0	0
11	2	6	-36802	-36802	0
11	2	7	-803233	-803233	0
11	2	8	-1704482	-1704482	0
11	2	9	-2767500	-2767500	0
11	2	10	-2936202	-2936202	0
11	2	11	-2852918	-2852918	0
11	2	12	-2238632	-2238632	0
11	2	13	-2348496	-2348496	0
11	2	14	-1828488	-1828488	0
11	2	15	-587192	-587192	0
11	2	16	0	0	0
11	2	17	0	0	0

11	2	18	0	0	0
11	2	19	0	0	0
11	2	20	0	0	0
11	2	21	0	0	0
11	2	22	0	0	0
11	2	23	0	0	0
11	3	0	0	0	0
11	3	1	0	0	0
11	3	2	0	0	0
11	3	3	0	0	0
11	3	4	0	0	0
11	3	5	0	0	0
11	3	6	0	0	0
11	3	7	-1208031	-1208031	0
11	3	8	-2254868	-2254868	0
11	3	9	-3002888	-3002888	0
11	3	10	-3427639	-3427639	0
11	3	11	-3528803	-3528803	0
11	3	12	-3370691	-3370691	0
11	3	13	-2859395	-2859395	0
11	3	14	-2091684	-2091684	0
11	3	15	-1061374	-1061374	0
11	3	16	0	0	0
11	3	17	0	0	0
11	3	18	0	0	0
11	3	19	0	0	0
11	3	20	0	0	0
11	3	21	0	0	0
11	3	22	0	0	0
11	3	23	0	0	0
11	4	0	0	0	0
11	4	1	0	0	0
11	4	2	0	0	0
11	4	3	0	0	0
11	4	4	0	0	0
11	4	5	0	0	0
11	4	6	0	0	0
11	4	7	-1186486	-1186486	0
11	4	8	-2247766	-2247766	0
11	4	9	-3001376	-3001376	0
11	4	10	-3429672	-3429672	0
11	4	11	-3530195	-3530195	0
11	4	12	-3365412	-3365412	0
11	4	13	-2870024	-2870024	0

11	4	14	-2093504	-2093504	0
11	4	15	-1071143	-1071143	0
11	4	16	0	0	0
11	4	17	0	0	0
11	4	18	0	0	0
11	4	19	0	0	0
11	4	20	0	0	0
11	4	21	0	0	0
11	4	22	0	0	0
11	4	23	0	0	0
11	5	0	0	0	0
11	5	1	0	0	0
11	5	2	0	0	0
11	5	3	0	0	0
11	5	4	0	0	0
11	5	5	0	0	0
11	5	6	0	0	0
11	5	7	-507708	-507708	0
11	5	8	-1466350	-1466350	0
11	5	9	-1496780	-1496780	0
11	5	10	-1733574	-1733574	0
11	5	11	-1092939	-1092939	0
11	5	12	-740117	-740117	0
11	5	13	-929494	-929494	0
11	5	14	-79190	-79190	0
11	5	15	-35285	-35285	0
11	5	16	0	0	0
11	5	17	0	0	0
11	5	18	0	0	0
11	5	19	0	0	0
11	5	20	0	0	0
11	5	21	0	0	0
11	5	22	0	0	0
11	5	23	0	0	0
11	6	0	0	0	0
11	6	1	0	0	0
11	6	2	0	0	0
11	6	3	0	0	0
11	6	4	0	0	0
11	6	5	0	0	0
11	6	6	0	0	0
11	6	7	-45615	-45615	0
11	6	8	-939205	-939205	0
11	6	9	-1415272	-1415272	0

11	6	10	-576367	-576367	0
11	6	11	-1331194	-1331194	0
11	6	12	-1773345	-1773345	0
11	6	13	-2189179	-2189179	0
11	6	14	-1558538	-1558538	0
11	6	15	-235082	-235082	0
11	6	16	0	0	0
11	6	17	0	0	0
11	6	18	0	0	0
11	6	19	0	0	0
11	6	20	0	0	0
11	6	21	0	0	0
11	6	22	0	0	0
11	6	23	0	0	0
11	7	0	0	0	0
11	7	1	0	0	0
11	7	2	0	0	0
11	7	3	0	0	0
11	7	4	0	0	0
11	7	5	0	0	0
11	7	6	0	0	0
11	7	7	-868610	-868610	0
11	7	8	-381339	-381339	0
11	7	9	-1129480	-1129480	0
11	7	10	-1603241	-1603241	0
11	7	11	-333388	-333388	0
11	7	12	-1945165	-1945165	0
11	7	13	-1077057	-1077057	0
11	7	14	-790394	-790394	0
11	7	15	-286395	-286395	0
11	7	16	0	0	0
11	7	17	0	0	0
11	7	18	0	0	0
11	7	19	0	0	0
11	7	20	0	0	0
11	7	21	0	0	0
11	7	22	0	0	0
11	7	23	0	0	0
11	8	0	0	0	0
11	8	1	0	0	0
11	8	2	0	0	0
11	8	3	0	0	0
11	8	4	0	0	0
11	8	5	0	0	0

11	8	6	0	0	0
11	8	7	-1191220	-1191220	0
11	8	8	-2295311	-2295311	0
11	8	9	-3115651	-3115651	0
11	8	10	-3562650	-3562650	0
11	8	11	-3664238	-3664238	0
11	8	12	-3490920	-3490920	0
11	8	13	-2975911	-2975911	0
11	8	14	-2171057	-2171057	0
11	8	15	-1093719	-1093719	0
11	8	16	0	0	0
11	8	17	0	0	0
11	8	18	0	0	0
11	8	19	0	0	0
11	8	20	0	0	0
11	8	21	0	0	0
11	8	22	0	0	0
11	8	23	0	0	0
11	9	0	0	0	0
11	9	1	0	0	0
11	9	2	0	0	0
11	9	3	0	0	0
11	9	4	0	0	0
11	9	5	0	0	0
11	9	6	0	0	0
11	9	7	-1191746	-1191746	0
11	9	8	-2309913	-2309913	0
11	9	9	-3074399	-3074399	0
11	9	10	-3538127	-3538127	0
11	9	11	-3667482	-3667482	0
11	9	12	-3502495	-3502495	0
11	9	13	-3000975	-3000975	0
11	9	14	-1302654	-1302654	0
11	9	15	-1130800	-1130800	0
11	9	16	0	0	0
11	9	17	0	0	0
11	9	18	0	0	0
11	9	19	0	0	0
11	9	20	0	0	0
11	9	21	0	0	0
11	9	22	0	0	0
11	9	23	0	0	0
11	10	0	0	0	0
11	10	1	0	0	0

11	10	2	0	0	0
11	10	3	0	0	0
11	10	4	0	0	0
11	10	5	0	0	0
11	10	6	0	0	0
11	10	7	-291709	-291709	0
11	10	8	-552794	-552794	0
11	10	9	-641106	-641106	0
11	10	10	-793100	-793100	0
11	10	11	-662967	-662967	0
11	10	12	-577768	-577768	0
11	10	13	-392457	-392457	0
11	10	14	-185323	-185323	0
11	10	15	-135028	-135028	0
11	10	16	0	0	0
11	10	17	0	0	0
11	10	18	0	0	0
11	10	19	0	0	0
11	10	20	0	0	0
11	10	21	0	0	0
11	10	22	0	0	0
11	10	23	0	0	0
11	11	0	0	0	0
11	11	1	0	0	0
11	11	2	0	0	0
11	11	3	0	0	0
11	11	4	0	0	0
11	11	5	0	0	0
11	11	6	0	0	0
11	11	7	-36475	-36475	0
11	11	8	-291462	-291462	0
11	11	9	-239038	-239038	0
11	11	10	-249582	-249582	0
11	11	11	-641786	-641786	0
11	11	12	-634930	-634930	0
11	11	13	-449572	-449572	0
11	11	14	-186865	-186865	0
11	11	15	-862346	-862346	0
11	11	16	0	0	0
11	11	17	0	0	0
11	11	18	0	0	0
11	11	19	0	0	0
11	11	20	0	0	0
11	11	21	0	0	0

11	11	22	0	0	0
11	11	23	0	0	0
11	12	0	0	0	0
11	12	1	0	0	0
11	12	2	0	0	0
11	12	3	0	0	0
11	12	4	0	0	0
11	12	5	0	0	0
11	12	6	0	0	0
11	12	7	-73902	-73902	0
11	12	8	-277131	-277131	0
11	12	9	-465065	-465065	0
11	12	10	-541646	-541646	0
11	12	11	-330228	-330228	0
11	12	12	-758220	-758220	0
11	12	13	-616165	-616165	0
11	12	14	-200879	-200879	0
11	12	15	-41411	-41411	0
11	12	16	0	0	0
11	12	17	0	0	0
11	12	18	0	0	0
11	12	19	0	0	0
11	12	20	0	0	0
11	12	21	0	0	0
11	12	22	0	0	0
11	12	23	0	0	0
11	13	0	0	0	0
11	13	1	0	0	0
11	13	2	0	0	0
11	13	3	0	0	0
11	13	4	0	0	0
11	13	5	0	0	0
11	13	6	0	0	0
11	13	7	-949328	-949328	0
11	13	8	-2020557	-2020557	0
11	13	9	-868825	-868825	0
11	13	10	-606457	-606457	0
11	13	11	-2663280	-2663280	0
11	13	12	-2486192	-2486192	0
11	13	13	-635119	-635119	0
11	13	14	-617644	-617644	0
11	13	15	-272103	-272103	0
11	13	16	0	0	0
11	13	17	0	0	0

11	13	18	0	0	0
11	13	19	0	0	0
11	13	20	0	0	0
11	13	21	0	0	0
11	13	22	0	0	0
11	13	23	0	0	0
11	14	0	0	0	0
11	14	1	0	0	0
11	14	2	0	0	0
11	14	3	0	0	0
11	14	4	0	0	0
11	14	5	0	0	0
11	14	6	0	0	0
11	14	7	-974241	-974241	0
11	14	8	-2145057	-2145057	0
11	14	9	-3016985	-3016985	0
11	14	10	-1567211	-1567211	0
11	14	11	-479884	-479884	0
11	14	12	-3035485	-3035485	0
11	14	13	-3053069	-3053069	0
11	14	14	-1446645	-1446645	0
11	14	15	-1083489	-1083489	0
11	14	16	0	0	0
11	14	17	0	0	0
11	14	18	0	0	0
11	14	19	0	0	0
11	14	20	0	0	0
11	14	21	0	0	0
11	14	22	0	0	0
11	14	23	0	0	0
11	15	0	0	0	0
11	15	1	0	0	0
11	15	2	0	0	0
11	15	3	0	0	0
11	15	4	0	0	0
11	15	5	0	0	0
11	15	6	0	0	0
11	15	7	-999179	-999179	0
11	15	8	-2114009	-2114009	0
11	15	9	-2014042	-2014042	0
11	15	10	-2337609	-2337609	0
11	15	11	-2041798	-2041798	0
11	15	12	-2132064	-2132064	0
11	15	13	-2356239	-2356239	0

11	15	14	-1833758	-1833758	0
11	15	15	-795570	-795570	0
11	15	16	0	0	0
11	15	17	0	0	0
11	15	18	0	0	0
11	15	19	0	0	0
11	15	20	0	0	0
11	15	21	0	0	0
11	15	22	0	0	0
11	15	23	0	0	0
11	16	0	0	0	0
11	16	1	0	0	0
11	16	2	0	0	0
11	16	3	0	0	0
11	16	4	0	0	0
11	16	5	0	0	0
11	16	6	0	0	0
11	16	7	-927554	-927554	0
11	16	8	-2026295	-2026295	0
11	16	9	-2823256	-2823256	0
11	16	10	-3304719	-3304719	0
11	16	11	-3456498	-3456498	0
11	16	12	-3283758	-3283758	0
11	16	13	-2810461	-2810461	0
11	16	14	-2026836	-2026836	0
11	16	15	-976356	-976356	0
11	16	16	0	0	0
11	16	17	0	0	0
11	16	18	0	0	0
11	16	19	0	0	0
11	16	20	0	0	0
11	16	21	0	0	0
11	16	22	0	0	0
11	16	23	0	0	0
11	17	0	0	0	0
11	17	1	0	0	0
11	17	2	0	0	0
11	17	3	0	0	0
11	17	4	0	0	0
11	17	5	0	0	0
11	17	6	0	0	0
11	17	7	-1059587	-1059587	0
11	17	8	-2237971	-2237971	0
11	17	9	-3072486	-3072486	0

11	17	10	-3530248	-3530248	0
11	17	11	-3680553	-3680553	0
11	17	12	-3496216	-3496216	0
11	17	13	-2999005	-2999005	0
11	17	14	-2158166	-2158166	0
11	17	15	-1026843	-1026843	0
11	17	16	0	0	0
11	17	17	0	0	0
11	17	18	0	0	0
11	17	19	0	0	0
11	17	20	0	0	0
11	17	21	0	0	0
11	17	22	0	0	0
11	17	23	0	0	0
11	18	0	0	0	0
11	18	1	0	0	0
11	18	2	0	0	0
11	18	3	0	0	0
11	18	4	0	0	0
11	18	5	0	0	0
11	18	6	0	0	0
11	18	7	-1015417	-1015417	0
11	18	8	-2179238	-2179238	0
11	18	9	-2993062	-2993062	0
11	18	10	-3451676	-3451676	0
11	18	11	-3582312	-3582312	0
11	18	12	-3389511	-3389511	0
11	18	13	-2912467	-2912467	0
11	18	14	-2090435	-2090435	0
11	18	15	-979845	-979845	0
11	18	16	0	0	0
11	18	17	0	0	0
11	18	18	0	0	0
11	18	19	0	0	0
11	18	20	0	0	0
11	18	21	0	0	0
11	18	22	0	0	0
11	18	23	0	0	0
11	19	0	0	0	0
11	19	1	0	0	0
11	19	2	0	0	0
11	19	3	0	0	0
11	19	4	0	0	0
11	19	5	0	0	0

11	19	6	0	0	0
11	19	7	-227134	-227134	0
11	19	8	-324216	-324216	0
11	19	9	-1414019	-1414019	0
11	19	10	-1198965	-1198965	0
11	19	11	-993256	-993256	0
11	19	12	-893472	-893472	0
11	19	13	-669353	-669353	0
11	19	14	-395052	-395052	0
11	19	15	-113495	-113495	0
11	19	16	0	0	0
11	19	17	0	0	0
11	19	18	0	0	0
11	19	19	0	0	0
11	19	20	0	0	0
11	19	21	0	0	0
11	19	22	0	0	0
11	19	23	0	0	0
11	20	0	0	0	0
11	20	1	0	0	0
11	20	2	0	0	0
11	20	3	0	0	0
11	20	4	0	0	0
11	20	5	0	0	0
11	20	6	0	0	0
11	20	7	-713899	-713899	0
11	20	8	-1803757	-1803757	0
11	20	9	-2675611	-2675611	0
11	20	10	-3062996	-3062996	0
11	20	11	-2665204	-2665204	0
11	20	12	-3298688	-3298688	0
11	20	13	-2802492	-2802492	0
11	20	14	-2019676	-2019676	0
11	20	15	-948402	-948402	0
11	20	16	0	0	0
11	20	17	0	0	0
11	20	18	0	0	0
11	20	19	0	0	0
11	20	20	0	0	0
11	20	21	0	0	0
11	20	22	0	0	0
11	20	23	0	0	0
11	21	0	0	0	0
11	21	1	0	0	0

11	21	2	0	0	0
11	21	3	0	0	0
11	21	4	0	0	0
11	21	5	0	0	0
11	21	6	0	0	0
11	21	7	-202195	-202195	0
11	21	8	-904630	-904630	0
11	21	9	-2927496	-2927496	0
11	21	10	-3394308	-3394308	0
11	21	11	-3544480	-3544480	0
11	21	12	-3359352	-3359352	0
11	21	13	-2860189	-2860189	0
11	21	14	-2023730	-2023730	0
11	21	15	-919843	-919843	0
11	21	16	0	0	0
11	21	17	0	0	0
11	21	18	0	0	0
11	21	19	0	0	0
11	21	20	0	0	0
11	21	21	0	0	0
11	21	22	0	0	0
11	21	23	0	0	0
11	22	0	0	0	0
11	22	1	0	0	0
11	22	2	0	0	0
11	22	3	0	0	0
11	22	4	0	0	0
11	22	5	0	0	0
11	22	6	0	0	0
11	22	7	-131369	-131369	0
11	22	8	-303069	-303069	0
11	22	9	-949243	-949243	0
11	22	10	-830601	-830601	0
11	22	11	-887658	-887658	0
11	22	12	-514631	-514631	0
11	22	13	-502305	-502305	0
11	22	14	-244424	-244424	0
11	22	15	-89500	-89500	0
11	22	16	0	0	0
11	22	17	0	0	0
11	22	18	0	0	0
11	22	19	0	0	0
11	22	20	0	0	0
11	22	21	0	0	0

11	22	22	0	0	0
11	22	23	0	0	0
11	23	0	0	0	0
11	23	1	0	0	0
11	23	2	0	0	0
11	23	3	0	0	0
11	23	4	0	0	0
11	23	5	0	0	0
11	23	6	0	0	0
11	23	7	-926057	-926057	0
11	23	8	-2126286	-2126286	0
11	23	9	-3003936	-3003936	0
11	23	10	-3490128	-3490128	0
11	23	11	-3649601	-3649601	0
11	23	12	-3484967	-3484967	0
11	23	13	-2996975	-2996975	0
11	23	14	-2154504	-2154504	0
11	23	15	-1000421	-1000421	0
11	23	16	0	0	0
11	23	17	0	0	0
11	23	18	0	0	0
11	23	19	0	0	0
11	23	20	0	0	0
11	23	21	0	0	0
11	23	22	0	0	0
11	23	23	0	0	0
11	24	0	0	0	0
11	24	1	0	0	0
11	24	2	0	0	0
11	24	3	0	0	0
11	24	4	0	0	0
11	24	5	0	0	0
11	24	6	0	0	0
11	24	7	-827895	-827895	0
11	24	8	-1980172	-1980172	0
11	24	9	-2838047	-2838047	0
11	24	10	-2580489	-2580489	0
11	24	11	-3566877	-3566877	0
11	24	12	-3353462	-3353462	0
11	24	13	-2859216	-2859216	0
11	24	14	-2019246	-2019246	0
11	24	15	-897319	-897319	0
11	24	16	0	0	0
11	24	17	0	0	0

11	24	18	0	0	0
11	24	19	0	0	0
11	24	20	0	0	0
11	24	21	0	0	0
11	24	22	0	0	0
11	24	23	0	0	0
11	25	0	0	0	0
11	25	1	0	0	0
11	25	2	0	0	0
11	25	3	0	0	0
11	25	4	0	0	0
11	25	5	0	0	0
11	25	6	0	0	0
11	25	7	-771073	-771073	0
11	25	8	-1914769	-1914769	0
11	25	9	-2762059	-2762059	0
11	25	10	-3361155	-3361155	0
11	25	11	-3512518	-3512518	0
11	25	12	-3342345	-3342345	0
11	25	13	-2835179	-2835179	0
11	25	14	-2010123	-2010123	0
11	25	15	-915236	-915236	0
11	25	16	0	0	0
11	25	17	0	0	0
11	25	18	0	0	0
11	25	19	0	0	0
11	25	20	0	0	0
11	25	21	0	0	0
11	25	22	0	0	0
11	25	23	0	0	0
11	26	0	0	0	0
11	26	1	0	0	0
11	26	2	0	0	0
11	26	3	0	0	0
11	26	4	0	0	0
11	26	5	0	0	0
11	26	6	0	0	0
11	26	7	-287573	-287573	0
11	26	8	-936566	-936566	0
11	26	9	-2678147	-2678147	0
11	26	10	-2303823	-2303823	0
11	26	11	-2272197	-2272197	0
11	26	12	-1238521	-1238521	0
11	26	13	-1321004	-1321004	0

11	26	14	-660017	-660017	0
11	26	15	-199095	-199095	0
11	26	16	0	0	0
11	26	17	0	0	0
11	26	18	0	0	0
11	26	19	0	0	0
11	26	20	0	0	0
11	26	21	0	0	0
11	26	22	0	0	0
11	26	23	0	0	0
11	27	0	0	0	0
11	27	1	0	0	0
11	27	2	0	0	0
11	27	3	0	0	0
11	27	4	0	0	0
11	27	5	0	0	0
11	27	6	0	0	0
11	27	7	-719670	-719670	0
11	27	8	-1262315	-1262315	0
11	27	9	-2021940	-2021940	0
11	27	10	-2314640	-2314640	0
11	27	11	-2716950	-2716950	0
11	27	12	-1860821	-1860821	0
11	27	13	-2435481	-2435481	0
11	27	14	-1500151	-1500151	0
11	27	15	-423070	-423070	0
11	27	16	0	0	0
11	27	17	0	0	0
11	27	18	0	0	0
11	27	19	0	0	0
11	27	20	0	0	0
11	27	21	0	0	0
11	27	22	0	0	0
11	27	23	0	0	0
11	28	0	0	0	0
11	28	1	0	0	0
11	28	2	0	0	0
11	28	3	0	0	0
11	28	4	0	0	0
11	28	5	0	0	0
11	28	6	0	0	0
11	28	7	-93791	-93791	0
11	28	8	-207585	-207585	0
11	28	9	-323908	-323908	0

11	28	10	-150342	-150342	0
11	28	11	-673206	-673206	0
11	28	12	-210985	-210985	0
11	28	13	-109593	-109593	0
11	28	14	-235420	-235420	0
11	28	15	-141515	-141515	0
11	28	16	0	0	0
11	28	17	0	0	0
11	28	18	0	0	0
11	28	19	0	0	0
11	28	20	0	0	0
11	28	21	0	0	0
11	28	22	0	0	0
11	28	23	0	0	0
11	29	0	0	0	0
11	29	1	0	0	0
11	29	2	0	0	0
11	29	3	0	0	0
11	29	4	0	0	0
11	29	5	0	0	0
11	29	6	0	0	0
11	29	7	-363691	-363691	0
11	29	8	-1586176	-1586176	0
11	29	9	-2938690	-2938690	0
11	29	10	-3445129	-3445129	0
11	29	11	-3610869	-3610869	0
11	29	12	-3433048	-3433048	0
11	29	13	-2921379	-2921379	0
11	29	14	-2109087	-2109087	0
11	29	15	-970471	-970471	0
11	29	16	0	0	0
11	29	17	0	0	0
11	29	18	0	0	0
11	29	19	0	0	0
11	29	20	0	0	0
11	29	21	0	0	0
11	29	22	0	0	0
11	29	23	0	0	0
11	30	0	0	0	0
11	30	1	0	0	0
11	30	2	0	0	0
11	30	3	0	0	0
11	30	4	0	0	0
11	30	5	0	0	0

11	30	6	0	0	0
11	30	7	-723751	-723751	0
11	30	8	-1936873	-1936873	0
11	30	9	-2812624	-2812624	0
11	30	10	-3362134	-3362134	0
11	30	11	-2539039	-2539039	0
11	30	12	-926036	-926036	0
11	30	13	-766487	-766487	0
11	30	14	-302879	-302879	0
11	30	15	-145146	-145146	0
11	30	16	0	0	0
11	30	17	0	0	0
11	30	18	0	0	0
11	30	19	0	0	0
11	30	20	0	0	0
11	30	21	0	0	0
11	30	22	0	0	0
11	30	23	0	0	0
12	1	0	0	0	0
12	1	1	0	0	0
12	1	2	0	0	0
12	1	3	0	0	0
12	1	4	0	0	0
12	1	5	0	0	0
12	1	6	0	0	0
12	1	7	-587594	-587594	0
12	1	8	-1052639	-1052639	0
12	1	9	-87969	-87969	0
12	1	10	-354555	-354555	0
12	1	11	-2330387	-2330387	0
12	1	12	-2212816	-2212816	0
12	1	13	-2844960	-2844960	0
12	1	14	-1999564	-1999564	0
12	1	15	-875565	-875565	0
12	1	16	0	0	0
12	1	17	0	0	0
12	1	18	0	0	0
12	1	19	0	0	0
12	1	20	0	0	0
12	1	21	0	0	0
12	1	22	0	0	0
12	1	23	0	0	0
12	2	0	0	0	0
12	2	1	0	0	0

12	2	2	0	0	0
12	2	3	0	0	0
12	2	4	0	0	0
12	2	5	0	0	0
12	2	6	0	0	0
12	2	7	-658353	-658353	0
12	2	8	-1918210	-1918210	0
12	2	9	-2126847	-2126847	0
12	2	10	-2605451	-2605451	0
12	2	11	-1211244	-1211244	0
12	2	12	-2688771	-2688771	0
12	2	13	-2214561	-2214561	0
12	2	14	-941871	-941871	0
12	2	15	-70358	-70358	0
12	2	16	0	0	0
12	2	17	0	0	0
12	2	18	0	0	0
12	2	19	0	0	0
12	2	20	0	0	0
12	2	21	0	0	0
12	2	22	0	0	0
12	2	23	0	0	0
12	3	0	0	0	0
12	3	1	0	0	0
12	3	2	0	0	0
12	3	3	0	0	0
12	3	4	0	0	0
12	3	5	0	0	0
12	3	6	0	0	0
12	3	7	-760930	-760930	0
12	3	8	-2022592	-2022592	0
12	3	9	-2955016	-2955016	0
12	3	10	-3492152	-3492152	0
12	3	11	-3684883	-3684883	0
12	3	12	-3518617	-3518617	0
12	3	13	-3039193	-3039193	0
12	3	14	-2172806	-2172806	0
12	3	15	-993076	-993076	0
12	3	16	0	0	0
12	3	17	0	0	0
12	3	18	0	0	0
12	3	19	0	0	0
12	3	20	0	0	0
12	3	21	0	0	0

12	3	22	0	0	0
12	3	23	0	0	0
12	4	0	0	0	0
12	4	1	0	0	0
12	4	2	0	0	0
12	4	3	0	0	0
12	4	4	0	0	0
12	4	5	0	0	0
12	4	6	0	0	0
12	4	7	-305525	-305525	0
12	4	8	-1778396	-1778396	0
12	4	9	-2679465	-2679465	0
12	4	10	-3259687	-3259687	0
12	4	11	-3443089	-3443089	0
12	4	12	-3259892	-3259892	0
12	4	13	-2772720	-2772720	0
12	4	14	-1905032	-1905032	0
12	4	15	-787142	-787142	0
12	4	16	0	0	0
12	4	17	0	0	0
12	4	18	0	0	0
12	4	19	0	0	0
12	4	20	0	0	0
12	4	21	0	0	0
12	4	22	0	0	0
12	4	23	0	0	0
12	5	0	0	0	0
12	5	1	0	0	0
12	5	2	0	0	0
12	5	3	0	0	0
12	5	4	0	0	0
12	5	5	0	0	0
12	5	6	0	0	0
12	5	7	-231390	-231390	0
12	5	8	-836329	-836329	0
12	5	9	-1524926	-1524926	0
12	5	10	-2247336	-2247336	0
12	5	11	-1823069	-1823069	0
12	5	12	-2047619	-2047619	0
12	5	13	-321414	-321414	0
12	5	14	-156950	-156950	0
12	5	15	-21838	-21838	0
12	5	16	0	0	0
12	5	17	0	0	0

12	5	18	0	0	0
12	5	19	0	0	0
12	5	20	0	0	0
12	5	21	0	0	0
12	5	22	0	0	0
12	5	23	0	0	0
12	6	0	0	0	0
12	6	1	0	0	0
12	6	2	0	0	0
12	6	3	0	0	0
12	6	4	0	0	0
12	6	5	0	0	0
12	6	6	0	0	0
12	6	7	-210723	-210723	0
12	6	8	-588129	-588129	0
12	6	9	-406623	-406623	0
12	6	10	-199424	-199424	0
12	6	11	-519049	-519049	0
12	6	12	-310518	-310518	0
12	6	13	-199473	-199473	0
12	6	14	-183422	-183422	0
12	6	15	-32409	-32409	0
12	6	16	0	0	0
12	6	17	0	0	0
12	6	18	0	0	0
12	6	19	0	0	0
12	6	20	0	0	0
12	6	21	0	0	0
12	6	22	0	0	0
12	6	23	0	0	0
12	7	0	0	0	0
12	7	1	0	0	0
12	7	2	0	0	0
12	7	3	0	0	0
12	7	4	0	0	0
12	7	5	0	0	0
12	7	6	0	0	0
12	7	7	-81837	-81837	0
12	7	8	-273912	-273912	0
12	7	9	-1077630	-1077630	0
12	7	10	-886663	-886663	0
12	7	11	-367715	-367715	0
12	7	12	-839185	-839185	0
12	7	13	-1390021	-1390021	0

12	7	14	-727171	-727171	0
12	7	15	-43531	-43531	0
12	7	16	0	0	0
12	7	17	0	0	0
12	7	18	0	0	0
12	7	19	0	0	0
12	7	20	0	0	0
12	7	21	0	0	0
12	7	22	0	0	0
12	7	23	0	0	0
12	8	0	0	0	0
12	8	1	0	0	0
12	8	2	0	0	0
12	8	3	0	0	0
12	8	4	0	0	0
12	8	5	0	0	0
12	8	6	0	0	0
12	8	7	-635830	-635830	0
12	8	8	-1859191	-1859191	0
12	8	9	-2787803	-2787803	0
12	8	10	-3371010	-3371010	0
12	8	11	-3574377	-3574377	0
12	8	12	-3436586	-3436586	0
12	8	13	-2949197	-2949197	0
12	8	14	-2089647	-2089647	0
12	8	15	-945257	-945257	0
12	8	16	0	0	0
12	8	17	0	0	0
12	8	18	0	0	0
12	8	19	0	0	0
12	8	20	0	0	0
12	8	21	0	0	0
12	8	22	0	0	0
12	8	23	0	0	0
12	9	0	0	0	0
12	9	1	0	0	0
12	9	2	0	0	0
12	9	3	0	0	0
12	9	4	0	0	0
12	9	5	0	0	0
12	9	6	0	0	0
12	9	7	-632041	-632041	0
12	9	8	-1853195	-1853195	0
12	9	9	-2757456	-2757456	0

12	9	10	-3317745	-3317745	0
12	9	11	-3523060	-3523060	0
12	9	12	-1537696	-1537696	0
12	9	13	-1259623	-1259623	0
12	9	14	-469094	-469094	0
12	9	15	-865983	-865983	0
12	9	16	0	0	0
12	9	17	0	0	0
12	9	18	0	0	0
12	9	19	0	0	0
12	9	20	0	0	0
12	9	21	0	0	0
12	9	22	0	0	0
12	9	23	0	0	0
12	10	0	0	0	0
12	10	1	0	0	0
12	10	2	0	0	0
12	10	3	0	0	0
12	10	4	0	0	0
12	10	5	0	0	0
12	10	6	0	0	0
12	10	7	-483298	-483298	0
12	10	8	-172019	-172019	0
12	10	9	-294820	-294820	0
12	10	10	-667148	-667148	0
12	10	11	-1018515	-1018515	0
12	10	12	-835071	-835071	0
12	10	13	-1816716	-1816716	0
12	10	14	-1151738	-1151738	0
12	10	15	-365217	-365217	0
12	10	16	0	0	0
12	10	17	0	0	0
12	10	18	0	0	0
12	10	19	0	0	0
12	10	20	0	0	0
12	10	21	0	0	0
12	10	22	0	0	0
12	10	23	0	0	0
12	11	0	0	0	0
12	11	1	0	0	0
12	11	2	0	0	0
12	11	3	0	0	0
12	11	4	0	0	0
12	11	5	0	0	0

12	11	6	0	0	0
12	11	7	-5305	-5305	0
12	11	8	-383546	-383546	0
12	11	9	-439404	-439404	0
12	11	10	-150795	-150795	0
12	11	11	-47108	-47108	0
12	11	12	-529301	-529301	0
12	11	13	-98363	-98363	0
12	11	14	-31253	-31253	0
12	11	15	-10421	-10421	0
12	11	16	0	0	0
12	11	17	0	0	0
12	11	18	0	0	0
12	11	19	0	0	0
12	11	20	0	0	0
12	11	21	0	0	0
12	11	22	0	0	0
12	11	23	0	0	0
12	12	0	0	0	0
12	12	1	0	0	0
12	12	2	0	0	0
12	12	3	0	0	0
12	12	4	0	0	0
12	12	5	0	0	0
12	12	6	0	0	0
12	12	7	-508252	-508252	0
12	12	8	-1704955	-1704955	0
12	12	9	-2651369	-2651369	0
12	12	10	-3252598	-3252598	0
12	12	11	-3467532	-3467532	0
12	12	12	-3350506	-3350506	0
12	12	13	-2887419	-2887419	0
12	12	14	-2072680	-2072680	0
12	12	15	-925411	-925411	0
12	12	16	0	0	0
12	12	17	0	0	0
12	12	18	0	0	0
12	12	19	0	0	0
12	12	20	0	0	0
12	12	21	0	0	0
12	12	22	0	0	0
12	12	23	0	0	0
12	13	0	0	0	0
12	13	1	0	0	0

12	13	2	0	0	0
12	13	3	0	0	0
12	13	4	0	0	0
12	13	5	0	0	0
12	13	6	0	0	0
12	13	7	-603239	-603239	0
12	13	8	-1851380	-1851380	0
12	13	9	-2804117	-2804117	0
12	13	10	-3372169	-3372169	0
12	13	11	-3601275	-3601275	0
12	13	12	-3459950	-3459950	0
12	13	13	-2995556	-2995556	0
12	13	14	-2165960	-2165960	0
12	13	15	-990971	-990971	0
12	13	16	0	0	0
12	13	17	0	0	0
12	13	18	0	0	0
12	13	19	0	0	0
12	13	20	0	0	0
12	13	21	0	0	0
12	13	22	0	0	0
12	13	23	0	0	0
12	14	0	0	0	0
12	14	1	0	0	0
12	14	2	0	0	0
12	14	3	0	0	0
12	14	4	0	0	0
12	14	5	0	0	0
12	14	6	0	0	0
12	14	7	-83435	-83435	0
12	14	8	-344140	-344140	0
12	14	9	-522860	-522860	0
12	14	10	-440030	-440030	0
12	14	11	-398855	-398855	0
12	14	12	-500826	-500826	0
12	14	13	-329195	-329195	0
12	14	14	-92566	-92566	0
12	14	15	-65280	-65280	0
12	14	16	0	0	0
12	14	17	0	0	0
12	14	18	0	0	0
12	14	19	0	0	0
12	14	20	0	0	0
12	14	21	0	0	0

12	14	22	0	0	0
12	14	23	0	0	0
12	15	0	0	0	0
12	15	1	0	0	0
12	15	2	0	0	0
12	15	3	0	0	0
12	15	4	0	0	0
12	15	5	0	0	0
12	15	6	0	0	0
12	15	7	-346494	-346494	0
12	15	8	-1507308	-1507308	0
12	15	9	-419907	-419907	0
12	15	10	-392089	-392089	0
12	15	11	-1577016	-1577016	0
12	15	12	-2540208	-2540208	0
12	15	13	-1816491	-1816491	0
12	15	14	-2140297	-2140297	0
12	15	15	-940431	-940431	0
12	15	16	0	0	0
12	15	17	0	0	0
12	15	18	0	0	0
12	15	19	0	0	0
12	15	20	0	0	0
12	15	21	0	0	0
12	15	22	0	0	0
12	15	23	0	0	0
12	16	0	0	0	0
12	16	1	0	0	0
12	16	2	0	0	0
12	16	3	0	0	0
12	16	4	0	0	0
12	16	5	0	0	0
12	16	6	0	0	0
12	16	7	-222622	-222622	0
12	16	8	-1758805	-1758805	0
12	16	9	-2696300	-2696300	0
12	16	10	-3267898	-3267898	0
12	16	11	-3467314	-3467314	0
12	16	12	-3324733	-3324733	0
12	16	13	-2844835	-2844835	0
12	16	14	-2052107	-2052107	0
12	16	15	-724857	-724857	0
12	16	16	0	0	0
12	16	17	0	0	0

12	16	18	0	0	0
12	16	19	0	0	0
12	16	20	0	0	0
12	16	21	0	0	0
12	16	22	0	0	0
12	16	23	0	0	0
12	17	0	0	0	0
12	17	1	0	0	0
12	17	2	0	0	0
12	17	3	0	0	0
12	17	4	0	0	0
12	17	5	0	0	0
12	17	6	0	0	0
12	17	7	-128796	-128796	0
12	17	8	-806682	-806682	0
12	17	9	-1488752	-1488752	0
12	17	10	-659908	-659908	0
12	17	11	-722778	-722778	0
12	17	12	-698876	-698876	0
12	17	13	-494358	-494358	0
12	17	14	-396492	-396492	0
12	17	15	-67733	-67733	0
12	17	16	0	0	0
12	17	17	0	0	0
12	17	18	0	0	0
12	17	19	0	0	0
12	17	20	0	0	0
12	17	21	0	0	0
12	17	22	0	0	0
12	17	23	0	0	0
12	18	0	0	0	0
12	18	1	0	0	0
12	18	2	0	0	0
12	18	3	0	0	0
12	18	4	0	0	0
12	18	5	0	0	0
12	18	6	0	0	0
12	18	7	-169312	-169312	0
12	18	8	-1565119	-1565119	0
12	18	9	-2508219	-2508219	0
12	18	10	-3094641	-3094641	0
12	18	11	-3315192	-3315192	0
12	18	12	-3155196	-3155196	0
12	18	13	-1368777	-1368777	0

12	18	14	-1119340	-1119340	0
12	18	15	-826274	-826274	0
12	18	16	0	0	0
12	18	17	0	0	0
12	18	18	0	0	0
12	18	19	0	0	0
12	18	20	0	0	0
12	18	21	0	0	0
12	18	22	0	0	0
12	18	23	0	0	0
12	19	0	0	0	0
12	19	1	0	0	0
12	19	2	0	0	0
12	19	3	0	0	0
12	19	4	0	0	0
12	19	5	0	0	0
12	19	6	0	0	0
12	19	7	-493198	-493198	0
12	19	8	-1695076	-1695076	0
12	19	9	-2664990	-2664990	0
12	19	10	-3252068	-3252068	0
12	19	11	-3443464	-3443464	0
12	19	12	-3334726	-3334726	0
12	19	13	-2863889	-2863889	0
12	19	14	-718492	-718492	0
12	19	15	-490849	-490849	0
12	19	16	0	0	0
12	19	17	0	0	0
12	19	18	0	0	0
12	19	19	0	0	0
12	19	20	0	0	0
12	19	21	0	0	0
12	19	22	0	0	0
12	19	23	0	0	0
12	20	0	0	0	0
12	20	1	0	0	0
12	20	2	0	0	0
12	20	3	0	0	0
12	20	4	0	0	0
12	20	5	0	0	0
12	20	6	0	0	0
12	20	7	-87181	-87181	0
12	20	8	-838024	-838024	0
12	20	9	-2461024	-2461024	0

12	20	10	-3037032	-3037032	0
12	20	11	-3252203	-3252203	0
12	20	12	-746839	-746839	0
12	20	13	-1875337	-1875337	0
12	20	14	-1047212	-1047212	0
12	20	15	-827331	-827331	0
12	20	16	0	0	0
12	20	17	0	0	0
12	20	18	0	0	0
12	20	19	0	0	0
12	20	20	0	0	0
12	20	21	0	0	0
12	20	22	0	0	0
12	20	23	0	0	0
12	21	0	0	0	0
12	21	1	0	0	0
12	21	2	0	0	0
12	21	3	0	0	0
12	21	4	0	0	0
12	21	5	0	0	0
12	21	6	0	0	0
12	21	7	-471362	-471362	0
12	21	8	-1668808	-1668808	0
12	21	9	-2136489	-2136489	0
12	21	10	-2418296	-2418296	0
12	21	11	-2630022	-2630022	0
12	21	12	-2084437	-2084437	0
12	21	13	-726392	-726392	0
12	21	14	-1853695	-1853695	0
12	21	15	-784986	-784986	0
12	21	16	0	0	0
12	21	17	0	0	0
12	21	18	0	0	0
12	21	19	0	0	0
12	21	20	0	0	0
12	21	21	0	0	0
12	21	22	0	0	0
12	21	23	0	0	0
12	22	0	0	0	0
12	22	1	0	0	0
12	22	2	0	0	0
12	22	3	0	0	0
12	22	4	0	0	0
12	22	5	0	0	0

12	22	6	0	0	0
12	22	7	-133348	-133348	0
12	22	8	-1521328	-1521328	0
12	22	9	-2441351	-2441351	0
12	22	10	-2145789	-2145789	0
12	22	11	-2398969	-2398969	0
12	22	12	-3067870	-3067870	0
12	22	13	-2563311	-2563311	0
12	22	14	-1208537	-1208537	0
12	22	15	-469406	-469406	0
12	22	16	0	0	0
12	22	17	0	0	0
12	22	18	0	0	0
12	22	19	0	0	0
12	22	20	0	0	0
12	22	21	0	0	0
12	22	22	0	0	0
12	22	23	0	0	0
12	23	0	0	0	0
12	23	1	0	0	0
12	23	2	0	0	0
12	23	3	0	0	0
12	23	4	0	0	0
12	23	5	0	0	0
12	23	6	0	0	0
12	23	7	-43013	-43013	0
12	23	8	-375502	-375502	0
12	23	9	-488870	-488870	0
12	23	10	-1248373	-1248373	0
12	23	11	-2418511	-2418511	0
12	23	12	-1330601	-1330601	0
12	23	13	-1574770	-1574770	0
12	23	14	-1602824	-1602824	0
12	23	15	-600291	-600291	0
12	23	16	0	0	0
12	23	17	0	0	0
12	23	18	0	0	0
12	23	19	0	0	0
12	23	20	0	0	0
12	23	21	0	0	0
12	23	22	0	0	0
12	23	23	0	0	0
12	24	0	0	0	0
12	24	1	0	0	0

12	24	2	0	0	0
12	24	3	0	0	0
12	24	4	0	0	0
12	24	5	0	0	0
12	24	6	0	0	0
12	24	7	-52610	-52610	0
12	24	8	-114989	-114989	0
12	24	9	-109220	-109220	0
12	24	10	-1149423	-1149423	0
12	24	11	-162266	-162266	0
12	24	12	-817034	-817034	0
12	24	13	-918702	-918702	0
12	24	14	-360172	-360172	0
12	24	15	-15501	-15501	0
12	24	16	0	0	0
12	24	17	0	0	0
12	24	18	0	0	0
12	24	19	0	0	0
12	24	20	0	0	0
12	24	21	0	0	0
12	24	22	0	0	0
12	24	23	0	0	0
12	25	0	0	0	0
12	25	1	0	0	0
12	25	2	0	0	0
12	25	3	0	0	0
12	25	4	0	0	0
12	25	5	0	0	0
12	25	6	0	0	0
12	25	7	-5302	-5302	0
12	25	8	-361697	-361697	0
12	25	9	-169437	-169437	0
12	25	10	-828057	-828057	0
12	25	11	-414643	-414643	0
12	25	12	-409998	-409998	0
12	25	13	-1841860	-1841860	0
12	25	14	-1286497	-1286497	0
12	25	15	-915325	-915325	0
12	25	16	0	0	0
12	25	17	0	0	0
12	25	18	0	0	0
12	25	19	0	0	0
12	25	20	0	0	0
12	25	21	0	0	0

12	25	22	0	0	0
12	25	23	0	0	0
12	26	0	0	0	0
12	26	1	0	0	0
12	26	2	0	0	0
12	26	3	0	0	0
12	26	4	0	0	0
12	26	5	0	0	0
12	26	6	0	0	0
12	26	7	-81713	-81713	0
12	26	8	-907556	-907556	0
12	26	9	-1116359	-1116359	0
12	26	10	-2093090	-2093090	0
12	26	11	-1325188	-1325188	0
12	26	12	-639932	-639932	0
12	26	13	-891923	-891923	0
12	26	14	-132492	-132492	0
12	26	15	-194288	-194288	0
12	26	16	0	0	0
12	26	17	0	0	0
12	26	18	0	0	0
12	26	19	0	0	0
12	26	20	0	0	0
12	26	21	0	0	0
12	26	22	0	0	0
12	26	23	0	0	0
12	27	0	0	0	0
12	27	1	0	0	0
12	27	2	0	0	0
12	27	3	0	0	0
12	27	4	0	0	0
12	27	5	0	0	0
12	27	6	0	0	0
12	27	7	-473068	-473068	0
12	27	8	-1670515	-1670515	0
12	27	9	-2617919	-2617919	0
12	27	10	-3222070	-3222070	0
12	27	11	-3452521	-3452521	0
12	27	12	-3359441	-3359441	0
12	27	13	-2944784	-2944784	0
12	27	14	-2194424	-2194424	0
12	27	15	-1135890	-1135890	0
12	27	16	0	0	0
12	27	17	0	0	0

12	27	18	0	0	0
12	27	19	0	0	0
12	27	20	0	0	0
12	27	21	0	0	0
12	27	22	0	0	0
12	27	23	0	0	0
12	28	0	0	0	0
12	28	1	0	0	0
12	28	2	0	0	0
12	28	3	0	0	0
12	28	4	0	0	0
12	28	5	0	0	0
12	28	6	0	0	0
12	28	7	-453291	-453291	0
12	28	8	-1654409	-1654409	0
12	28	9	-2616474	-2616474	0
12	28	10	-3167542	-3167542	0
12	28	11	-3407661	-3407661	0
12	28	12	-3305928	-3305928	0
12	28	13	-2915884	-2915884	0
12	28	14	-1942553	-1942553	0
12	28	15	-493200	-493200	0
12	28	16	0	0	0
12	28	17	0	0	0
12	28	18	0	0	0
12	28	19	0	0	0
12	28	20	0	0	0
12	28	21	0	0	0
12	28	22	0	0	0
12	28	23	0	0	0
12	29	0	0	0	0
12	29	1	0	0	0
12	29	2	0	0	0
12	29	3	0	0	0
12	29	4	0	0	0
12	29	5	0	0	0
12	29	6	0	0	0
12	29	7	-354382	-354382	0
12	29	8	-1531832	-1531832	0
12	29	9	-2470305	-2470305	0
12	29	10	-3050603	-3050603	0
12	29	11	-3290447	-3290447	0
12	29	12	-2398645	-2398645	0
12	29	13	-2825966	-2825966	0

12	29	14	-2065477	-2065477	0
12	29	15	-1023092	-1023092	0
12	29	16	0	0	0
12	29	17	0	0	0
12	29	18	0	0	0
12	29	19	0	0	0
12	29	20	0	0	0
12	29	21	0	0	0
12	29	22	0	0	0
12	29	23	0	0	0
12	30	0	0	0	0
12	30	1	0	0	0
12	30	2	0	0	0
12	30	3	0	0	0
12	30	4	0	0	0
12	30	5	0	0	0
12	30	6	0	0	0
12	30	7	-31559	-31559	0
12	30	8	-522453	-522453	0
12	30	9	-576772	-576772	0
12	30	10	-626274	-626274	0
12	30	11	-103880	-103880	0
12	30	12	-3085712	-3085712	0
12	30	13	-2735379	-2735379	0
12	30	14	-1519379	-1519379	0
12	30	15	-964717	-964717	0
12	30	16	0	0	0
12	30	17	0	0	0
12	30	18	0	0	0
12	30	19	0	0	0
12	30	20	0	0	0
12	30	21	0	0	0
12	30	22	0	0	0
12	30	23	0	0	0
12	31	0	0	0	0
12	31	1	0	0	0
12	31	2	0	0	0
12	31	3	0	0	0
12	31	4	0	0	0
12	31	5	0	0	0
12	31	6	0	0	0
12	31	7	-65079	-65079	0
12	31	8	-801230	-801230	0
12	31	9	-623013	-623013	0

12	31	10	-1685086	-1685086	0
12	31	11	-1136239	-1136239	0
12	31	12	-1979843	-1979843	0
12	31	13	-2907012	-2907012	0
12	31	14	-2156648	-2156648	0
12	31	15	-419400	-419400	0
12	31	16	0	0	0
12	31	17	0	0	0
12	31	18	0	0	0
12	31	19	0	0	0
12	31	20	0	0	0
12	31	21	0	0	0
12	31	22	0	0	0
12	31	23	0	0	0

The Narragansett Electric Company  
d/b/a Rhode Island Energy

In Re: Proposed FY 2024 Electric Infrastructure, Safety and Reliability Plan  
21-Month Filing: Period April 2023 – December 2024  
Responses to the Division’s Second Set of Data Requests  
Issued on November 17, 2022

---

Division 2-17

Request:

Is the Company planning GMP investments to integrate DER that serves local load, exports off the system (solely wholesale market participant), or both? How will the Company assign grid access costs in either case? Can a DER participate in both local and wholesale markets? If so, how does the Company know the status of the DER at any given time, and how will the Company assign distribution grid access costs?

Response:

The Company is considering distribution and transmission investments to integrate distributed energy resources (“DERs”). The Grid Modernization Plan (“GMP”) investments are focused on the distribution system and provide a number of benefits including DER integration. The Company has also performed a transmission study to analyze infrastructure needs to accommodate exports off the system though it will require additional study and evaluation to fully analyze multiple configurations and was considered outside the scope of the GMP distribution study.

Currently, a DER can participate in both local and wholesale markets. Implications of local and/or wholesale market participation were not assessed in the transmission analysis to date. Because there may be operational and cost allocation conflicts that occur by dual market participation at the local and wholesale markets, however, the Company may be revisiting the policy that allows DERs the opportunity to participate in both markets in the future.

Cost allocation is not determined based on DER access to markets. Per the DG interconnection tariff, cost allocation is based on interconnection infrastructure needs determined during impact studies.<sup>1</sup> The Company recognizes that, as DER penetration builds, it will be increasingly more difficult to attribute system changes to a particular DER interconnection (please see the Company’s response to Division 2-15) and therefore, cost allocation methods and tariffs could change. The GMP provides the best opportunity to adapt to the various possible allocation methods, including an allocation method based on market access.

The Company currently does not have the technology to know the status of any particular DER at any given time and assign distribution grid costs based on such knowledge. The GMP investments will provide the technology to achieve that exact goal.

---

<sup>1</sup> See Standards for Connecting Distributed Generation, R.I.P.U.C. No. 2258, Section 1.2 (Definitions – Impact Study); Section 3.0 (Process Overview); Section 3.4 (Standard Process). Impact studies are generally completed for DERs 250 kilowatts and higher.

The Narragansett Electric Company  
d/b/a Rhode Island Energy

In Re: Proposed FY 2024 Electric Infrastructure, Safety and Reliability Plan  
21-Month Filing: Period April 2023 – December 2024  
Responses to the Division's Second Set of Data Requests  
Issued on November 17, 2022

---

Division 2-18

Request:

The Company proposes ISR Plan spend to meet State clean energy goals (page 5). Please provide the underlying State clean energy goal requirements or policies that specifically direct or inform the Company's responsibilities in meeting the goals. How is the Company coordinating its strategic planning with other state agencies or partners? How has the Company validated long term assumptions or forecasts against those used by other state agencies or partners where the same underlying data may inform a state-wide strategic plan? How is the Company actively participating in council meetings or working groups at the state level?

Response:

The State's underlying clean energy \ requirements are stated clearly in Rhode Island's 2021 Act on Climate ("AOC")<sup>1</sup> and Rhode Island's Renewable Energy Standard.<sup>2</sup> The AOC establishes that the State shall reduce its statewide greenhouse gas emissions to the following targets, as those targets may from time to time be revised, and that those targets shall be mandatory:<sup>3</sup>

- 10% below 1990 levels by 2020;
- 45% below 1990 levels by 2030;
- 80% below 1990 levels by 2040; and
- Net-zero emissions by 2050.

In 2022, the Renewable Energy Standard was amended to increase the escalation schedule (as set forth below) regarding the requirement that "all obligated entities" (which include the Company) obtain a minimum percentage of all electricity they sell at retail to Rhode Island end-use customers, adjusted for electric line losses, from eligible renewable energy resources:<sup>4</sup>

- An additional 4% of retail electricity sales in 2023;
- An additional 5% of retail electricity sales in 2024;
- An additional 6% of retail electricity sales in 2025;
- An additional 7% of retail electricity sales in 2026 and 2027;
- An additional 7.5% of retail electricity sales in 2028;
- An additional 8% of retail electricity sales in 2029;
- An additional 8.5%of retail electricity sales in 2030;

---

<sup>1</sup> R.I. Gen. Laws Chapter 42-6.2.

<sup>2</sup> R.I. Gen. Laws Chapter 39-26.

<sup>3</sup> R.I. Gen. Laws § 42-6.2-9.

<sup>4</sup> R.I. Gen. Laws § 39-26-4(a).

The Narragansett Electric Company  
d/b/a Rhode Island Energy

In Re: Proposed FY 2024 Electric Infrastructure, Safety and Reliability Plan  
21-Month Filing: Period April 2023 – December 2024  
Responses to the Division's Second Set of Data Requests  
Issued on November 17, 2022

---

Division 2-18, page 2

- An additional 9% of retail electricity sales in 2031; and
- An additional 9.5% of retail electricity sales in 2032 and 2033 to achieve the goal that 100% of Rhode Island's electricity demand is from renewable energy by 2033 and each year thereafter.

The Company developed an internal method to calculate net energy converted to the electric system starting with U.S. Energy Information Administration CO<sub>2</sub> state-based emissions data.<sup>5</sup> This internal method was developed because data to the required level of detail was not available, and a state-wide strategic plan aligned with the newly passed AOC was not available. The Company is aware of current state agency efforts and will be coordinating its methods and modeling results with state agencies or partners to actively assist in developing state-wide strategic plans. The Company is aware that economic-based strategic plan details can be different than details needed to plan electric systems. The Company has attended the public meetings and full meetings of the Executive Climate Change Coordinating Council to collect feedback as it develops its plans to meet the Act on Climate mandates.

---

<sup>5</sup> <https://www.eia.gov/environment/emissions/state/>.

The Narragansett Electric Company  
d/b/a Rhode Island Energy

In Re: Proposed FY 2024 Electric Infrastructure, Safety and Reliability Plan  
21-Month Filing: Period April 2023 – December 2024  
Responses to the Division’s Second Set of Data Requests  
Issued on November 17, 2022

---

Division 2-19

Request:

Describe the Company’s work to identify potential funding opportunities under the federal Infrastructure Investment and Jobs Act. Include a description of internal teams or partnerships developed to monitor funding opportunities, team members and oversight, frequency of meetings, and outcomes of evaluations. What specific opportunities exist for RIE to receive funding that would offset capital and/or O&M spend under the ISR Plan (including metering costs associated with proposed AMF) or proposed GMP spend? Provide details and discuss how RIE will leverage these opportunities, providing the status of any federal offerings or Company applications.

Response:

Bringing in federal funding to support Rhode Island is a priority for Rhode Island Energy (“the Company”) and PPL Corporation. In short, the Company is planning to apply for federal funding to support grid resilience and offset costs of grid modernization.

The Company currently is developing proposals for the Grid Resilience and Innovation Partnerships (“GRIP”) Funding Opportunity Announcement (“FOA”) offered via the Infrastructure Investment and Jobs Act (“IIJA”).<sup>1,2</sup> The GRIP FOA has three topic areas, and the Company is an eligible applicant for two of them. For these two topic areas, federal funding is provided as a competitive grant, meaning that the Company cannot know with any certainty whether the funding will be available until it submits a concept paper and then an application, provided the Company receives an encouragement notification from the United States Department of Energy (“DOE”) to its concept paper,<sup>3</sup> the DOE selects the Company for a GRIP grant award, and contract negotiations with the DOE are complete. For the purposes of the

---

<sup>1</sup> At this time, the GRIP FOA is the only open funding opportunity available to Rhode Island Energy for projects that would be proposed through either this current ISR Plan or a future ISR Plan.

<sup>2</sup> The IIJA is available here: <https://www.congress.gov/117/plaws/publ58/PLAW-117publ58.pdf>. The White House compiled this helpful guidebook to all IIJA programs: [https://www.whitehouse.gov/wp-content/uploads/2022/01/BUILDING-A-BETTER-AMERICA\\_FINAL.pdf](https://www.whitehouse.gov/wp-content/uploads/2022/01/BUILDING-A-BETTER-AMERICA_FINAL.pdf). The United States Department of Energy posts updates on IIJA programs related to energy here: <https://www.energy.gov/bil/bipartisan-infrastructure-law-programs>.

<sup>3</sup> The GRIP FOA requires a two-stage application process. The first stage “Concept Paper” is due December 16, 2022. The second stage “Full Application” is due April 6, 2023, for Topic Area 1 and March 17, 2023 for Topic Area 2.

The Narragansett Electric Company  
d/b/a Rhode Island Energy

In Re: Proposed FY 2024 Electric Infrastructure, Safety and Reliability Plan  
21-Month Filing: Period April 2023 – December 2024  
Responses to the Division’s Second Set of Data Requests  
Issued on November 17, 2022

---

Division 2-19, page 2

Fiscal Year 2024 Electric Infrastructure, Safety, and Reliability (“ISR”) Plan, at this time, the Company does not know whether it will have any federal funding that will be available to offset costs with any level of certainty.<sup>4</sup>

Topic Area 1, Grid Resilience, is a competitive grant for up to \$100 million in federal funding with a 100% cost match<sup>5</sup> to support projects that reduce the impacts of disruptive events, particularly extreme weather events. The Company plans to apply for a portfolio of projects that reduce disruption from coastal storms and flooding. This portfolio includes undergrounding and hardening of electric utility infrastructure and flood mitigation measures, and relocation of the Company’s Westerly Substation and reconstruction of that substation. Topic Area 1 specifically requires that federal funding be supplemental to existing resilience efforts:

Grants under this program are in general intended to be supplemental to existing hardening efforts of applicants for any given year. The applicant should describe in a narrative how the grant funding provided by this program would result in proposed activities that are additional to efforts that would have been undertaken but for the funding and will generate the greatest community or regional resilience benefit in reducing the likelihood and consequences of disruptive events. This may include the acceleration or expansion of planned activities that would not be accelerated or expanded but-for the funding. The narrative should reference the *Report on Resilience Investments* to demonstrate how the proposed activities would be additional to existing planned investments.<sup>6</sup>

GRIP Topic Area 2, Smart Grid, is a competitive grant for up to \$50 million in federal funding with a 50% cost share<sup>7</sup> to support projects that advance electric grid capabilities. The Company plans to apply for a suite of information technology-related projects and associated hardware (these investments are part of the Company’s Grid Modernization Plan, which the Company

---

<sup>4</sup> The FOA for the GRIP grants states the expected timeframe for award negotiations is Fall 2023. The Company will work with regulators to understand the timing of filings, contingencies, and any required reconciliations in the event that federal funding is awarded and received (with the conversations with regulators happening both before and after the funding is received).

<sup>5</sup> From the funding opportunity announcement: “An eligible entity that receives a grant under this section shall be required to match 100% of the amount of the grant (at least 50% of the Federal funds only, rather than the Total Project Cost).”

<sup>6</sup> United States Department of Energy, Grid Deployment Office, and Office of Clean Energy Demonstrations, *Financial Assistance Funding Opportunity Announcement, DE-FOA-0002740, BIL – Grid Resilience and Innovation Partnership 23* (2022).

<sup>7</sup> From the funding opportunity announcement: “The cost share must be at least 50% of the total project costs. The cost share must come from non-federal sources unless otherwise allowed by law.”

The Narragansett Electric Company  
d/b/a Rhode Island Energy

In Re: Proposed FY 2024 Electric Infrastructure, Safety and Reliability Plan  
21-Month Filing: Period April 2023 – December 2024  
Responses to the Division’s Second Set of Data Requests  
Issued on November 17, 2022

---

Division 2-19, page 3

expects to file with the Rhode Island Public Utilities Commission (“Commission”) at the end of December 2022).<sup>8</sup> After preliminary analysis, the Company believes its Topic Area 2 proposal – if awarded and pending appropriate regulatory oversight and approval – could reduce customer costs by up to \$50 million otherwise proposed through future ISR Plans and deliver some benefits of grid modernization up to two years in advance.

The DOE will evaluate proposals under both topic areas for “the degree to which the proposed project yields additive benefit(s) from the federal funding to undertake additional efforts that would not be taken but for the funding or to accelerate or expand planned activities that would not be accelerated or expanded but-for the funding.”<sup>9</sup> This evaluation criterion sets some limitation to the magnitude of customer funding that can be categorically offset via the GRIP FOA.

The Company held briefings on its GRIP proposals with Commission staff on November 30, 2022, and with Division staff on December 7, 2022.

PPL Services Corporation (“PPL”) contracted with a consultant in September 2021 to begin thinking about the IIJA (before the IIJA was signed into law as the Bipartisan Infrastructure Law). Since its acquisition by PPL Rhode Island Holdings, LLC, in May 2022, the Company also has worked with this consultant and held internal discussions about potential application concepts and strategies. This consultant helps to keep the Company updated on funding opportunities via a weekly digest email and via ad hoc communications. This consultant will also support the Company throughout the application process.

The internal Company team focused on leveraging federal funding is comprised of staff who span departments, including External Affairs, Planning, Engineering, Regulatory, and Legal. On behalf of this internal team, the Senior Manager of Electric Regulatory Strategy reports out to the Company President on a bi-weekly basis on thinking, strategy, progress, and updates. The Company also communicates about federal funding with PPL Corporation and its affiliates on a biweekly-to-monthly basis (and on a more frequent basis based on the DOE’s publication of the GRIP FOA). This communication includes monthly report-outs to PPL Corporation’s executive leadership.

---

<sup>8</sup> At this time, the Company does not anticipate submitting an application for IIJA funding for advanced metering costs, specifically.

<sup>9</sup> United States Department of Energy, Grid Deployment Office, and Office of Clean Energy Demonstrations, Financial Assistance Funding Opportunity Announcement, DE-FOA-0002740, BIL – Grid Resilience and Innovation Partnership 82, 86 (2022).

The Narragansett Electric Company  
d/b/a Rhode Island Energy

In Re: Proposed FY 2024 Electric Infrastructure, Safety and Reliability Plan  
21-Month Filing: Period April 2023 – December 2024  
Responses to the Division’s Second Set of Data Requests  
Issued on November 17, 2022

---

Division 2-19, page 4

The GRIP FOA (akin to an official Request for Proposals) was issued on November 18, 2022. Since then, the Company team, PPL, and its consultant have mobilized to develop and submit a concept paper and then, an application. There are two stages to the application process – the first stage requires submission of a “Concept Paper” that provides a higher-level narrative about the project concept. The Company will submit a concept paper for both Topic Area 1 and Topic Area 2 by the DOE’s deadline of December 16, 2022.<sup>10</sup>

The Company continues to monitor federal funding opportunities on an ongoing basis and welcomes updates and suggestions from both regulators and stakeholders on available opportunities and opportunities for partnership.

---

<sup>10</sup> After submission of the Concept Paper, reviewers selected by the United State Department of Energy will assess all Concept Papers for responsiveness and viability. The results of the reviewers' assessment will be provided to the applicant. Results include whether the concept is encouraged or discouraged to submit a full application and may include general comments provided from reviewers. The second stage of the application process is to submit a “Full Application” that includes in-depth detail about the applicant’s proposal.

The Narragansett Electric Company  
d/b/a Rhode Island Energy

In Re: Proposed FY 2024 Electric Infrastructure, Safety and Reliability Plan  
21-Month Filing: Period April 2023 – December 2024  
Responses to the Division's Second Set of Data Requests  
Issued on November 17, 2022

---

Division 2-20

Request:

Provide a detailed table of all 2023 and 2024 GMP projects listing for each project: (a) what type of communications it will require to be installed in order to integrate the operations back to the PPL ADMS, (b) when the telecommunication equipment and infrastructure will be fully functional, (c) when the ADMS will have complete functional control of the device, and (d) when the RIE control center will have complete functionality and control of the device.

Response:

Please see the table below:

Equipment Type	Units FY 2023	Units FY 2024	Comms Type (a)	Comms Functional (b)	ADMS Control (c)	Control Center (d)
Capacitors and Regulators	146	194	Cellular	Upon Commissioning	Upon Commissioning	RIE DCC Upon Commissioning
Reclosers	222	315	Cellular	Upon Commissioning	Upon Commissioning	RIE DCC Upon Commissioning
Micro-processor Relays	19	26	Fiber/ Cellular	Upon Commissioning	May 2024	NGRID Upon Commissioning

The process is to have cellular communications available upon commissioning thereby providing pairing between the device and ADMS at the time of commissioning and immediate access to the Control Center.

Planning is underway to transfer the operational responsibility of the Control Center from National Grid to PPL by the termination of the Transition Services Agreement (“TSA”) in May 2024. The communications for the outside the fence devices are cellular.

- New devices will be brought directly into PPL’s ADMS and will be available for use by the Rhode Island Energy Distribution Control Center (“DCC”) upon commissioning.
- These new devices will NOT be sent to the National Grid systems.

The substations communications will be a mix of communications from fiber to cellular where the substation cutovers to TMS are shaping up to all happen together before the TSA exit. The

The Narragansett Electric Company  
d/b/a Rhode Island Energy  
In Re: Proposed FY 2024 Electric Infrastructure, Safety and Reliability Plan  
21-Month Filing: Period April 2023 – December 2024  
Responses to the Division's Second Set of Data Requests  
Issued on November 17, 2022

---

Division 2-20, page 2

19 micro-processor relays will be sent to the National Grid Control Center upon commissioning and then cut over to PPL with the station transfer.

**Division Set 3**

December 14, 2022

**VIA ELECTRONIC MAIL & HAND DELIVERY**

Luly E. Massaro, Commission Clerk  
Rhode Island Division of Public Utilities and Carriers  
89 Jefferson Boulevard  
Warwick, RI 02888

**RE: RIE's Proposed FY2024 Electric Infrastructure, Safety, and Reliability Plan  
Responses to Division Set 3**

Dear Ms. Massaro:

On behalf of The Narragansett Electric Company d/b/a Rhode Island Energy (the "Company"), enclosed, please find the Company's responses to the Division's Third Set of Data Requests in the above-referenced matter.

Please be advised that the Company considers the following attachments and responses to be confidential: Attachment DIV 3-2 and Attachment DIV 3-3; the response to Division 3-10 and Division 3-11.

The Company received an extension to December 26, 2022 to respond to data request Division 3-6.

Thank you for your attention to this filing. If you have any questions, please contact me at 401-784-4263.

Sincerely,



Andrew S. Marcaccio

Enclosures

cc: Gregory Schultz, Esq., Division  
Christy Hetherington, Esq., Division  
Paul Roberti, Esq., Division  
Al Contente, Division  
John Bell, Division  
Greg Booth, Division  
Linda Kushner, Division

The Narragansett Electric Company  
d/b/a Rhode Island Energy

In Re: Proposed FY 2024 Electric Infrastructure, Safety and Reliability Plan  
21-Month Filing: Period April 2023 – December 2024  
Responses to the Division’s Third Set of Data Requests  
Issued on November 23, 2022

---

Division 3-1

Request:

What was the maximum available fault current at each substation and at each line protection device and the end of each feeder before the proliferation of DG (2015 or other date selected by RIE) and the same locations now?

Response:

The Advanced System for Process Engineering (“ASPEN”) base case model serves as the system repository for all impedance and fault duty information for the transmission system, including substations. This model is maintained by protection engineering resources to meet ISO-NE modeling requirements. The request for fault current information at each station is not readily available because this information resides in the model itself. A lengthy manual process would be required to extract this information.

The ASPEN base case does not contain any distribution line information. The Company uses extracts from the Geographic Information System (“GIS”) to build standalone distribution models and subsequently perform protection reviews and analyses. The GIS system gets updated frequently, and the Company does not maintain older versions or information from previous years. The request for fault current information at line protective devices, and end of line, on distribution feeders for previous years is not available. Similar to substation information, extracting current fault current information for the entire distribution system would be a very lengthy process because the Company has thousands of protective devices over several hundred feeders.

Please see the Company’s response to Division 2-8 for example before and after distributed generation impacts to fault current values.

The Narragansett Electric Company  
d/b/a Rhode Island Energy  
In Re: Proposed FY 2024 Electric Infrastructure, Safety and Reliability Plan  
21-Month Filing: Period April 2023 – December 2024  
Responses to the Division’s Third Set of Data Requests  
Issued on November 23, 2022

---

Division 3-2

Request:

Provide a map of the PPL system showing the location of each center in which line crews are staged to be dispatched to respond to an outage.

Response:

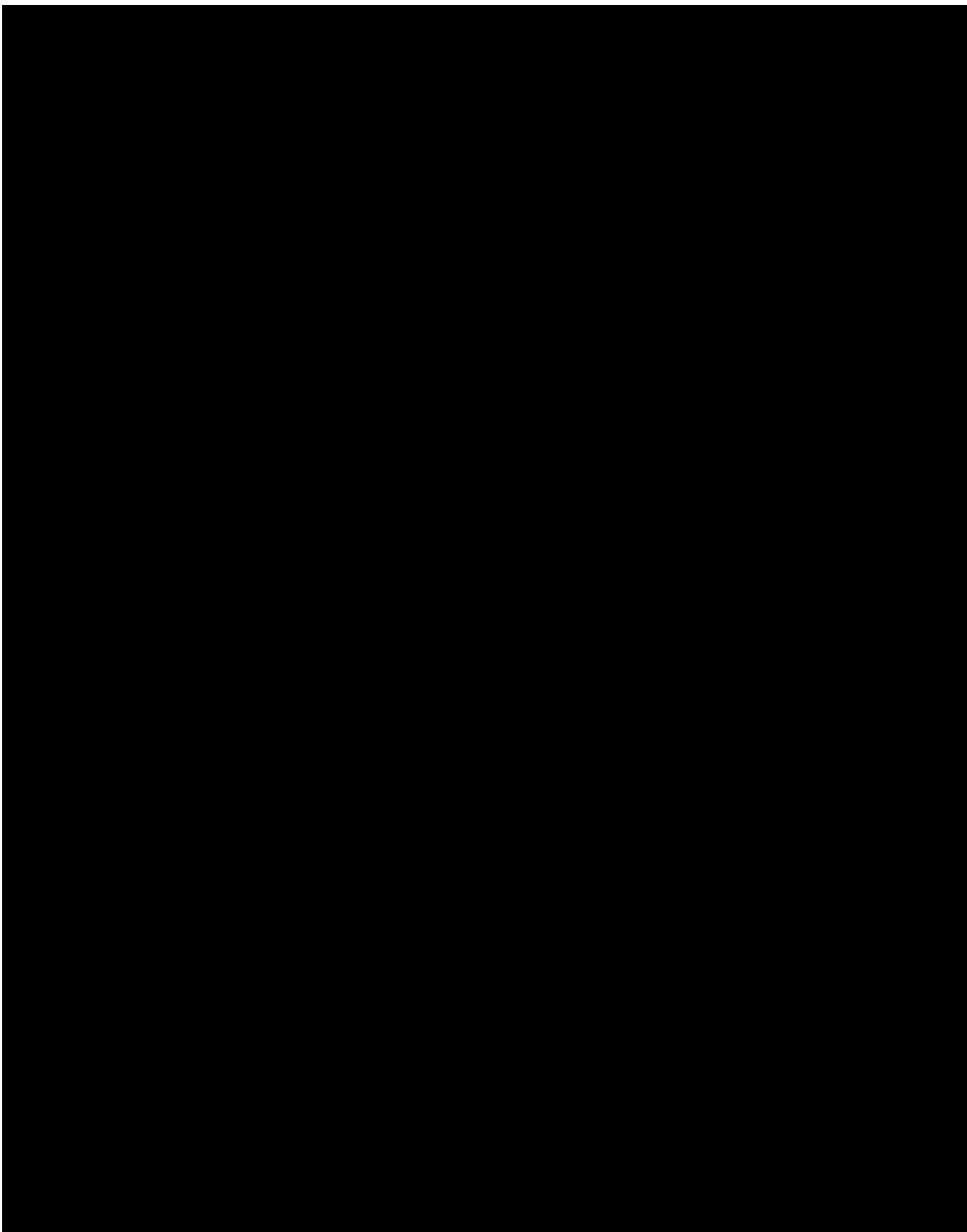
PPL Electric Utilities Corporation (“PPL EU”) stages internal and external crews at the locations identified in Attachment DIV 3-2.

The Company has provided this table to respond to the Division’s data request; however, the Company asserts that this information is irrelevant to the evaluation of its Fiscal Year 2024 Electric Infrastructure, Safety and Reliability plan because it played no part in the development of the Company’s proposed capital investments and other spending.

**REDACTED**

The Narragansett Electric Company  
d/b/a Rhode Island Energy  
In Re: Proposed FY 2024 Electric Infrastructure, Safety and Reliability Plan  
Attachment DIV 3-2  
Attachment DIV 3-2  
Page 1 of 1

The Narragansett Electric Company  
d/b/a Rhode Island Energy  
In Re: Proposed FY 2024 Electric Infrastructure, Safety and Reliability Plan  
Attachment DIV 3-2  
Page 1 of 1



The Narragansett Electric Company  
d/b/a Rhode Island Energy  
In Re: Proposed FY 2024 Electric Infrastructure, Safety and Reliability Plan  
21-Month Filing: Period April 2023 – December 2024  
Responses to the Division's Third Set of Data Requests  
Issued on November 23, 2022

---

Division 3-3

Request:

Provide a map of the RIE system showing the location of each center in which line crews are staged to be dispatched to respond to an outage.

Response:

The Company stages internal and external crews at district headquarters, satellite offices, and staging sites to be dispatched to respond to an outage. See Attachment DIV 3-3 for locations of each center.

**REDACTED**

The Narragansett Electric Company  
d/b/a Rhode Island Energy  
In Re: Proposed FY 2024 Electric Infrastructure, Safety and Reliability Plan  
Attachment DIV 3-3  
Page 1 of 1

Attachment DIV 3-3

The Company is seeking confidential treatment of this attachment.

The Narragansett Electric Company  
d/b/a Rhode Island Energy

In Re: Proposed FY 2024 Electric Infrastructure, Safety and Reliability Plan  
21-Month Filing: Period April 2023 – December 2024  
Responses to the Division’s Third Set of Data Requests  
Issued on November 23, 2022

---

Division 3-4

Request:

RIE has stated that the Company has a different risk tolerance now than under the prior ownership. Please elaborate by providing a definition of current risk tolerance and comparing that definition to risk tolerance prior to PPL ownership. Provide internal documentation or guidance on how risk tolerance is applied and measured, both at an enterprise level and for RIE. Explain how RIE’s risk tolerance is informed by Rhode Island statutory or regulatory requirements and if not, why RIE would adopt risk tolerance guidance informed through other jurisdictions where the Company does not operate. Describe how RIE’s different risk tolerance has changed its distribution planning processes and associated programs, and specifically why risk tolerance requires the proposed level of additional of reclosers.

Response:

When the Company discussed risk tolerance with the Division of Public Utilities and Carriers (the “Division”), it did so in a qualitative not a quantitative manner. The definitions, comparisons, and documentation requested are not available. Further, the Company has not adopted risk tolerance guidance informed by the statutory or regulatory requirements of other jurisdictions where the Company does not operate. Finally, the Company has not modified distribution system planning criteria that have been shared previously with the Division and has not changed planning processes.

The Company mentioned risk tolerance when discussing the inclusion of recloser installations, area long range planning study infrastructure development recommendations, and grid modernization investments in the 21-month electric Infrastructure, Safety, and Reliability (“ISR”) plan. The Company recognizes additional recloser installations as an efficient, near-immediate approach to improve customer service reliability. The Company is now internally striving for top first quartile SAIFI performance when compared to peer utilities, which is better performance than required under the PUC’s performance penalty threshold of 1.05.

The Company has recognized and accepted the results of the long-range area studies completed prior to the change of ownership from National Grid USA to PPL Rhode Island Holdings, LLC, which occurred on May 25, 2022. The Company views planning criteria as a “bright line” and will address violations of criteria by advancing study infrastructure development recommendations as expeditiously as possible. This focus has changed the priority and sequence of projects.

Through study and based on PPL Corporation’s experience in other jurisdictions, the Company has concluded that grid modernization investments are needed now and will provide near-term

The Narragansett Electric Company  
d/b/a Rhode Island Energy  
In Re: Proposed FY 2024 Electric Infrastructure, Safety and Reliability Plan  
21-Month Filing: Period April 2023 – December 2024  
Responses to the Division’s Third Set of Data Requests  
Issued on November 23, 2022

---

Division 3-4, page 2

improvements in system safety, reliability, and performance during both normal and emergency operations. The Company now has personnel with ten years of grid modernization installation and management experience, which helps to mitigate execution risk associated with these investments.

The Narragansett Electric Company  
d/b/a Rhode Island Energy  
In Re: Proposed FY 2024 Electric Infrastructure, Safety and Reliability Plan  
21-Month Filing: Period April 2023 – December 2024  
Responses to the Division’s Third Set of Data Requests  
Issued on November 23, 2022

---

Division 3-5

Request:

Provide a list of each reliability complaint for the most recent five years which RIE is relying upon to claim customer reliability dissatisfaction and provide a circuit map showing the location of each complaint.

Response:

Customer outage complaints come from various sources such as direct calls or emails to Rhode Island Energy’s Community and Customer Management Organization, National Grid’s Elevated Customer Complaint Department, or the Division of Public Utilities and Carriers. In addition, field workers receive complaints directly from customers.

Although the Company does not maintain a formal database, it conducted a survey of various departments. Since PPL Rhode Island Holdings, LLC closed on the acquisition of 100% of the outstanding shares of common stock of The Narragansett Electric Company and rebranded the Company as Rhode Island Energy on May 25, 2022, the Company has recorded 13 outage complaints. Attachment DIV 3-5 lists the date, the agency reporting the incident to the Company, and ancillary notes.

Maps of customer complaints were not provided because specific address information was not always included in the complaint record; however, street and town names are noted in the table when known.

The Narragansett Electric Company  
 d/b/a Rhode Island Energy  
 Attachment DIV 3-5  
 In Re: Proposed FY 2024 Electric Infrastructure, Safety and Reliability Plan  
 Page 1 of 1

The Narragansett Electric Company  
 d/b/a Rhode Island Energy  
 In Re: Proposed FY 2024 Gas Infrastructure, Safety and Reliability Plan  
 Attachment DIV 3-5  
 Page 1 of 1

Informal list of customer outage complaints collected from May 21, 2022 through September 30, 2021.

Sources: National Grid US Customer Escalated Complaints Department, RI E Community and Customer Group, RI E Field Engineering

Item #	Date	Division	Agency / Source	Method	D number	Inquiry Type	Inquiry Item	Subject	Comments
1	May 2022	Coastal	Direct Request via Customer	Unknown	NA	Reliability Outage	Multiple Outages	Outages	Outages to the Warwick Neck Area
2	June 2022	Capital	Direct Request via Customer	Email	NA	Reliability Outage	Multiple Outages	Outages	Cullen Hill Rd and Martin St Cumberland. RECEIVED A BBB COMPLAINT underground wiring serving neighborhood has experienced frequent power outages unrelated to weather or storms.
3	May 31, 2022	Coastal	Better Business Bureau	Unknown	63069-70012	Reliability Outage	Multiple Outages	Outage	
4	July 28, 2022	Coastal	RI DPU/C	Unknown	63970-90001	Reliability Outage	Multiple Outages	Outage	multiple outages- underground cable being replaced
5	August, 1 2022	Coastal	Direct Request via Warwick Mayor's office	Phone	NA	Reliability Outage	Outage		
6	August 10, 2022	Capital	RI DPU/C	Unknown	27892-60075	Reliability Outage	Multiple Outages	Outage	MULTIPLE OUTAGES
7	August 23, 2022	Capital	RI DPU/C	Unknown	38331-88018	Reliability Outage	outage	delayed outage response	Governor's office inquiry
8	September 2, 2022	Capital	RI DPU/C	Phone	18277-82011	Reliability Outage	outage	no power	From DPU/C related to outage
9	September 9, 2022	Capital	RI DPU/C	Email	75069-06019	Reliability Outage	multiple outage	frequent outages	DPU/C- outage complaint
			Direct Request via Warwick Mayor's office						
10	September 12, 2022	Coastal	RI DPU/C	Email	NA	Reliability Outage	outage	outage	Outages Second Point Rd, Warwick 4 events in 2 months
11	October 11, 2022	Capital	Direct Request via Customer	Phone	18997-47002	Reliability Outage	outage		
12	October 12, 2022	Coastal	RI DPU/C	Email	NA	Reliability Outage	Outage		Summer Brown St, Cumberland
13	October 18, 2022	Capital	RI DPU/C	Phone	900157-3029	Reliability Outage	outage	outage	DPU/C- customer had outage

The Narragansett Electric Company  
d/b/a Rhode Island Energy  
In Re: Proposed FY 2024 Electric Infrastructure, Safety and Reliability Plan  
21-Month Filing: Period April 2023 – December 2024  
Responses to the Division’s Third Set of Data Requests  
Issued on November 23, 2022

---

Division 3-6

Request:

Provide each fact relied upon by JD Powers to support the RIE statement that the utility is in the 4th quartile of reliability in the study.

Response:

The Company received an extension to December 21, 2022 from the Division to respond to this request. The Company’s response will be provided under separate cover.

Andrew S. Marcaccio, Counsel  
PPL Services Corporation  
[AMarcaccio@pplweb.com](mailto:AMarcaccio@pplweb.com)

280 Melrose Street  
Providence, RI 02907  
Phone 401-784-7263



December 21, 2022

**VIA ELECTRONIC MAIL & HAND DELIVERY**

Luly E. Massaro, Commission Clerk  
Rhode Island Division of Public Utilities and Carriers  
89 Jefferson Boulevard  
Warwick, RI 02888

**RE: RIE's Proposed FY2024 Electric Infrastructure, Safety, and Reliability Plan  
Response to Division 3-6**

Dear Ms. Massaro:

On behalf of The Narragansett Electric Company d/b/a Rhode Island Energy (the "Company"), enclosed, please find the Company's response to data request Division 3-6.

This transmittal completes the Company's responses to the Division's Third Set of Data Requests in this matter.

Thank you for your attention to this filing. If you have any questions, please contact me at 401-784-4263.

Sincerely,



Andrew S. Marcaccio

Enclosures

cc: Gregory Schultz, Esq., Division  
Christy Hetherington, Esq., Division  
Paul Roberti, Esq., Division  
Al Contente, Division  
John Bell, Division  
Greg Booth, Division  
Linda Kushner, Division

The Narragansett Electric Company  
d/b/a Rhode Island Energy

In Re: Proposed FY 2024 Electric Infrastructure, Safety and Reliability Plan  
21-Month Filing: Period April 2023 – December 2024  
Responses to the Division's Third Set of Data Requests  
Issued on November 23, 2022

---

Division 3-6

Request:

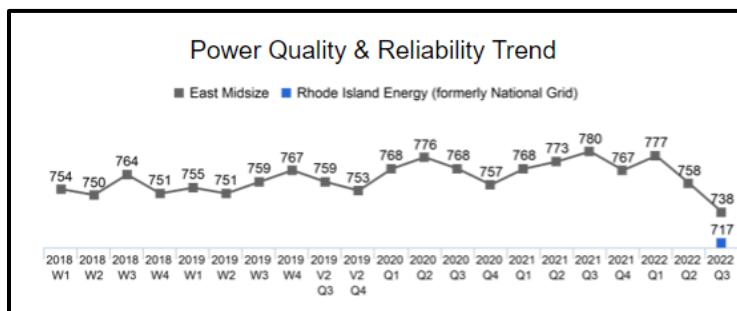
Provide each fact relied upon by JD Powers to support the RIE statement that the utility is in the 4th quartile of reliability in the study.

Response:

The Company is a recipient of the J.D. Power report. The Company does not have access to the details of the report nor the analysis used to determine the results. The most recent survey results that support the assertion that the Company's performance currently is fourth quartile is shown below.

J.D. Power Electric Residential results for the Company are available for the third quarter of 2022. Power Quality and Reliability ("PQR") performance currently is scored at 717, which is in the fourth quartile. See Table 1, below. The peer group average for East Midsize performance in PQR measured at 738. Overall, satisfaction scores for PQR trended downward for all East Midsize companies in 2022.

*Table 1. JD Powers RIE PQ&R Third Quarter Performance.*



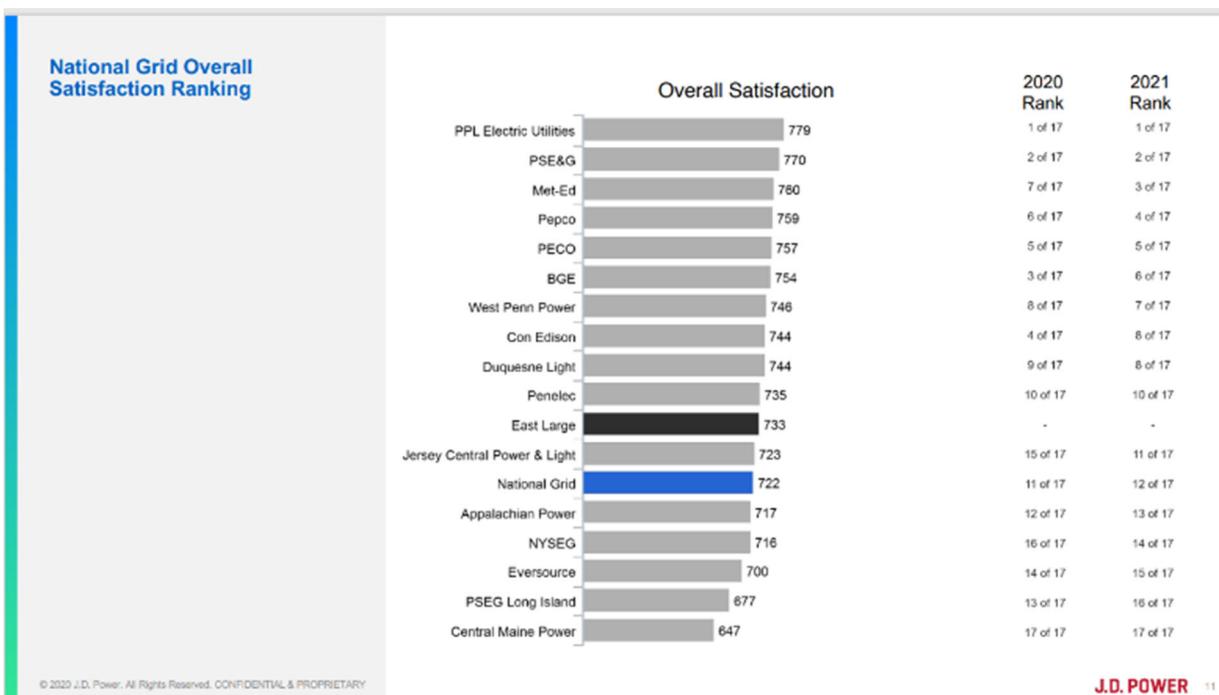
Prior to the sale of the Company to PPL Rhode Island Holdings, LLC, in May 2022, the Company's survey results were included in National Grid's East Large Company group. Although the Company has limited access to National Grid's proprietary survey results, National Grid did share Overall Satisfaction Ratings for the past several years. Table 2 illustrates that National Grid's Overall Satisfaction Rating for 2020 (11/17) and 2021 (12/17) was in the third quartile (11/17) compared to other companies in the East Large Utilities group. Table 3 shows National Grid's Overall Satisfaction ranking has consistently been fourth quartile as compared to its peers for the previous six years. PPL Electric Utilities Corporation consistently has been ranked first for the same time period, 2016 through 2021.

The Narragansett Electric Company  
d/b/a Rhode Island Energy  
In Re: Proposed FY 2024 Electric Infrastructure, Safety and Reliability Plan  
21-Month Filing: Period April 2023 – December 2024  
Responses to the Division's Third Set of Data Requests  
Issued on November 23, 2022

Division 3-6, page 2

Survey result specific to PQR are not available.

*Table 2, JD Power Overall Satisfaction Rankings 2020 and 2021.*



*Table 3, JD Power Overall Satisfaction Rating East Large Ranking Trend*

Prepared by or under the supervision of: Ryan Constable

The Narragansett Electric Company  
d/b/a Rhode Island Energy

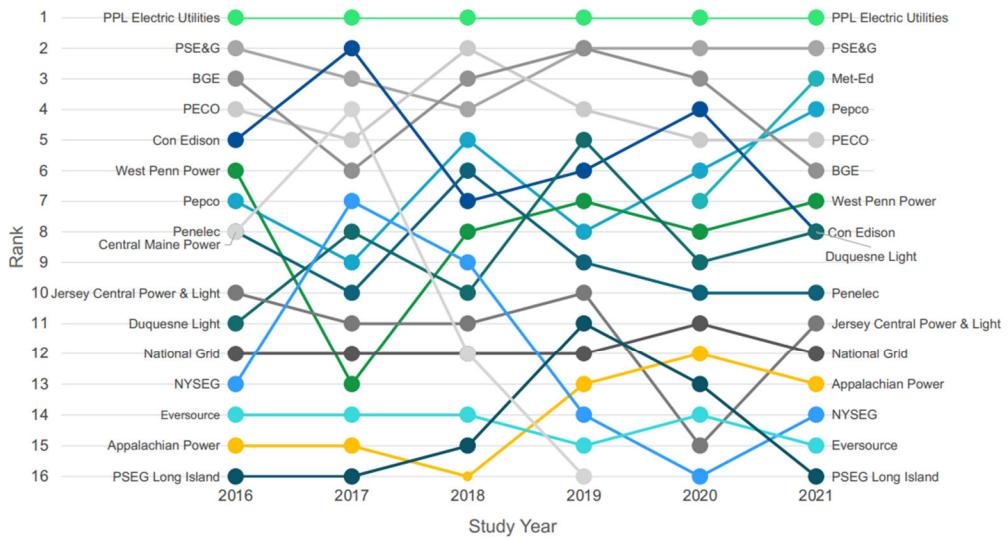
In Re: Proposed FY 2024 Electric Infrastructure, Safety and Reliability Plan  
21-Month Filing: Period April 2023 – December 2024  
Responses to the Division's Third Set of Data Requests  
Issued on November 23, 2022

---

Division 3-6, page 3

**Ranking Trend Line Chart**

**East Large Ranking Trend**



**J.D. POWER** 10

© J.D. Power. All Rights Reserved. CONFIDENTIAL & PROPRIETARY.

The Narragansett Electric Company  
d/b/a Rhode Island Energy  
In Re: Proposed FY 2024 Electric Infrastructure, Safety and Reliability Plan  
21-Month Filing: Period April 2023 – December 2024  
Responses to the Division’s Third Set of Data Requests  
Issued on November 23, 2022

---

Division 3-7

Request:

How has RIE accounted for changes in fault current levels from transmission upgrades over the years?

Response:

Protection Engineering is required to provide the most up to date models to ISO New England (“ISO-NE”) on an interval basis. Transmission upgrades due to generation and other Company work are updated into the ASPEN model aligned with ISO-NE requirements.

The Narragansett Electric Company  
d/b/a Rhode Island Energy  
In Re: Proposed FY 2024 Electric Infrastructure, Safety and Reliability Plan  
21-Month Filing: Period April 2023 – December 2024  
Responses to the Division's Third Set of Data Requests  
Issued on November 23, 2022

---

Division 3-8

Request:

How does RIE account for the fault current changes associated with the DG added on the transmission side of its deliver points?

Response:

Please see the Company's responses to Division 3-1 and Division 3-7 for how the Company accounts for fault current changes associated with transmission generation.

The Narragansett Electric Company  
d/b/a Rhode Island Energy

In Re: Proposed FY 2024 Electric Infrastructure, Safety and Reliability Plan  
21-Month Filing: Period April 2023 – December 2024  
Responses to the Division’s Third Set of Data Requests  
Issued on November 23, 2022

---

Division 3-9

Request:

How has RIE accounted for the changes in fault current levels with the high penetration of DG?

Response:

During a distributed generation (“DG”) system impact study, the Company completes a protection review to assess the changes a DG interconnection could cause to the system. The Company then proposes mitigation to those changes to maintain the fault current at acceptable levels and maintain coordination between protective devices. The recommendations could come from either customer modifications or system modifications. Customer modifications are changes to the customer’s equipment required to maintain the fault current at acceptable levels. System modifications include system wide changes to maintain acceptable fault current and acceptable coordination among all protective devices in a circuit and could include changes to protective device settings and the installation of additional protective devices. The Company updates this information into its distribution GIS system and, if necessary, into the ASPEN base case. Please see the Company’s response to Division 2-8 for example before and after DG impacts to fault current values and protection clearing times.

The Narragansett Electric Company  
d/b/a Rhode Island Energy  
In Re: Proposed FY 2024 Electric Infrastructure, Safety and Reliability Plan  
21-Month Filing: Period April 2023 – December 2024  
Responses to the Division’s Third Set of Data Requests  
Issued on November 23, 2022

---

**Redacted**  
Division 3-10

Request:

How many circuits does PPL have in Pennsylvania and what is its square miles of service territory and what is its average circuit length? Provide by overhead and underground.

Response:

The Company has provided this table to respond to the Division’s data request; however, the Company asserts that this information is irrelevant to evaluation of its Fiscal Year 2024 Electric Infrastructure, Safety and Reliability plan because it played no part in the development of the Company’s proposed capital investments and other spending.

Statistic	Distribution
# Of Circuits	
Overhead Circuit Miles	
Underground Circuit Miles	
Average Overhead Circuit Miles	
Average Underground Circuit Miles	
Square Miles	

The Narragansett Electric Company  
d/b/a Rhode Island Energy  
In Re: Proposed FY 2024 Electric Infrastructure, Safety and Reliability Plan  
21-Month Filing: Period April 2023 – December 2024  
Responses to the Division's Third Set of Data Requests  
Issued on November 23, 2022

---

**Redacted**  
Division 3-11

Request:

How many circuits does RIE have in RI and what is the square mile of service territory and what is the average circuit length? Provide by overhead and underground.

Response:

Statistic	Distribution	Sub-transmission
# Of Circuits		
Overhead Circuit Miles		
Underground Circuit Miles		
Average Overhead Circuit Miles		
Average Underground Circuit Miles		
Square Miles		

The Narragansett Electric Company  
d/b/a Rhode Island Energy

In Re: Proposed FY 2024 Electric Infrastructure, Safety and Reliability Plan  
21-Month Filing: Period April 2023 – December 2024  
Responses to the Division’s Third Set of Data Requests  
Issued on November 23, 2022

---

Division 3-12

Request:

Does RIE accept that changes in fault current levels, particularly increases, affect the coordination of power line protective equipment such as relays, reclosers, and fuses?

Response:

Yes, Rhode Island Energy (“RIE” or the “Company”) accepts and has always recognized that changes in fault current play an important role in protection coordination. The Company’s engineers are experts at understanding and analyzing fault current levels.

The Company does not accept the premise that a system wide fault current and coordination study must be conducted for RIE to propose and the Division of Public Utilities and Carriers (“Division”) to review certain investments within the FY 2024 Electric Infrastructure, Safety, and Reliability Plan (“ISR Plan”). As explained by the Company during recent discussions with the Division, a system-wide study is not necessary to review the investments in the ISR Plan and conducting such a study would be an inefficient use of resources. A protection coordination study should only be performed on the necessary subset of the system when and where fault current and/or protective devices change. In terms of timing, such a coordination study is typically done at the early stages of execution and not during budget or ISR Plan development.

The Narragansett Electric Company  
d/b/a Rhode Island Energy  
In Re: Proposed FY 2024 Electric Infrastructure, Safety and Reliability Plan  
21-Month Filing: Period April 2023 – December 2024  
Responses to the Division’s Third Set of Data Requests  
Issued on November 23, 2022

---

Division 3-13

Request:

What practice of other utilities and industry groups such as IEEE, RUS and others has RIE evaluated in order to support its position that periodic system wide protective coordination studies are not necessary?

Response:

Rhode Island Energy’s (“RIE’s” or the “Company’s”) position is based on the expertise of the Company’s engineers. Given the Company’s in-house proficiency in protection analysis, the Company has not conducted any evaluation of other utilities and industry groups to support its position. In this case, a system wide study is neither appropriate nor an efficient use of resources.

The Narragansett Electric Company  
d/b/a Rhode Island Energy  
In Re: Proposed FY 2024 Electric Infrastructure, Safety and Reliability Plan  
21-Month Filing: Period April 2023 – December 2024  
Responses to the Division's Third Set of Data Requests  
Issued on November 23, 2022

---

Division 3-14

Request:

Provide all analyses of the RIE system that have been completed to support the sizable increase in proposed spending on reclosers.

Response:

See Rhode Island Energy's response to Division 1-23. It provides a summary of issues and justifications, a recommended plan, and benefits associated with recloser installations.

The Narragansett Electric Company  
d/b/a Rhode Island Energy  
In Re: Proposed FY 2024 Electric Infrastructure, Safety and Reliability Plan  
21-Month Filing: Period April 2023 – December 2024  
Responses to the Division’s Third Set of Data Requests  
Issued on November 23, 2022

---

Division 3-15

Request:

Provide all analyses and/or studies that show the proposed recloser additions will not increase RIE SAIDI results.

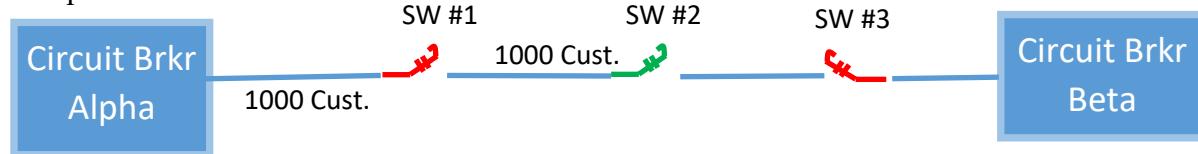
Response:

System Average Interruption Duration Index (“SAIDI”) results will not increase by adding reclosers. Reducing the number of customers impacted by sustained interruptions decreases Customer Minutes Interrupted (“CMI”) of the event, which reduces SAIDI. The examples below illustrate the SAIDI impacts for faults with and without reclosers.

SAIDI is calculated by:

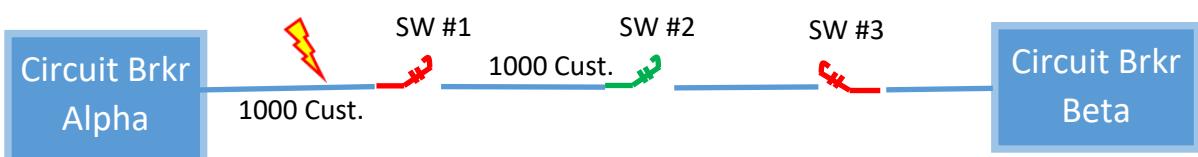
$$SAIDI \text{ (min)} = \frac{\text{Customer Minutes Interrupted (CMI)}}{\text{Customers Served (Cs)}}$$

Sample Circuit:



Alpha circuit serves 2000 customers (“Cs”), has a midpoint switch (“SW #1”) and has a normally open tie to Beta circuit at switch 2 (“SW #2”). Circuit patrols and manual switching take 30 minutes. Line repairs take 90 minutes.

Example 1A, Calculate SAIDI for a fault near the substation on a circuit without reclosers.



The Narragansett Electric Company  
d/b/a Rhode Island Energy  
In Re: Proposed FY 2024 Electric Infrastructure, Safety and Reliability Plan  
21-Month Filing: Period April 2023 – December 2024  
Responses to the Division’s Third Set of Data Requests  
Issued on November 23, 2022

---

Division 3-15, page 2

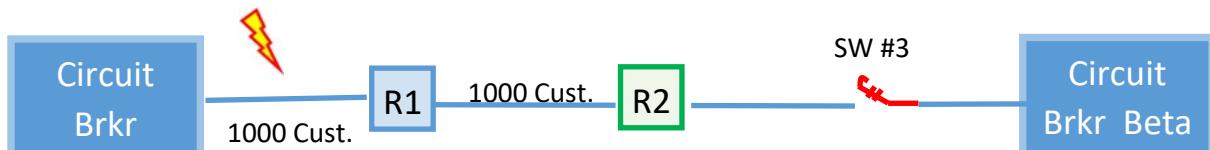
The cadence of the repair, customers interrupted (“CI”) and the event SAIDI are shown in Table 1.

Table 1

Near Fault Event Cadence and SAIDI without Reclosers				
Step	Time (Min)	Action	CI	CMI
0	T=0	Alpha Circuit Breaker opens	2,000	-
1	T=30	Entire Line patrolled, SW #1 opens SW #2 closes	1,000	30,000
2	T= 120	Fault repaired Alpha Circuit Breaker closes	-	120,000
			Total CMI	150,000
			Total Cs	2,000
			SAIDI =	75 min

Example 1B, Calculate SAIDI for a fault near the station on a circuit with reclosers.

For this example, SW #1 and SW #2 have been replaced with reclosers. As shown below, recloser 1 (“R1”) is in the middle of the circuit. Recloser 2 (“R2”) is installed on the tie point between Alpha and Beta circuits and remains normally open. The event cadence, CMI and SAIDI calculation are shown in table 2, The CMI for the event reduces from 150,000 to 90,000. Event SAIDI reduces to 45 min.



The Company recognizes that additional time would be saved responding to the event because Operations personnel need to patrol only the line segment between the station and the first recloser. Note, time saved for reduced patrols was not included in the example.

The Narragansett Electric Company  
 d/b/a Rhode Island Energy  
 In Re: Proposed FY 2024 Electric Infrastructure, Safety and Reliability Plan  
 21-Month Filing: Period April 2023 – December 2024  
 Responses to the Division's Third Set of Data Requests  
 Issued on November 23, 2022

---

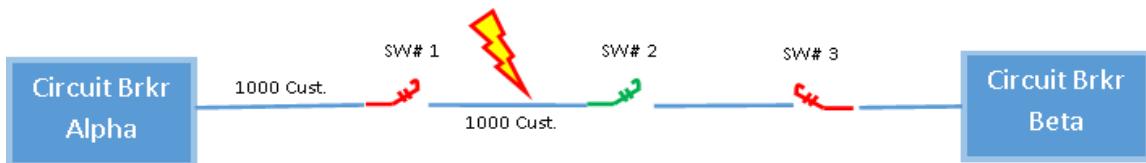
Division 3-15, page 3

Table 2

Near Fault Event Cadence and SAIDI with Reclosers				
Step	Time (Min)	Action	CI	CMI
0	T=0	Alpha Circuit Breaker opens	2,000	-
1	Automatic/ Momentary	R1 Opens, R2 Closes	1,000	-
2	T= 90	Line between Station and R1 patrolled Fault repaired, Alpha Circuit Breaker closes	-	90,000
		Total CMI	90,000	
		Cs	2,000	
		SAIDI =	45 min	

Example 2A: Calculate SAIDI for a far fault between SW #1 and SW #2 on a circuit with no reclosers.

For the original circuit with no reclosers, the repair cadence changes slightly. After the initial fault, the entire circuit is patrolled, SW #1 is opened, and Alpha circuit breaker is closed. Once the problem area is isolated, repairs are made and SW #1 is closed, restoring the final customers. SAIDI remains 75 minutes as reflected in table 3.



[Table 3 begins on next page]

The Narragansett Electric Company  
d/b/a Rhode Island Energy

In Re: Proposed FY 2024 Electric Infrastructure, Safety and Reliability Plan  
21-Month Filing: Period April 2023 – December 2024  
Responses to the Division's Third Set of Data Requests  
Issued on November 23, 2022

---

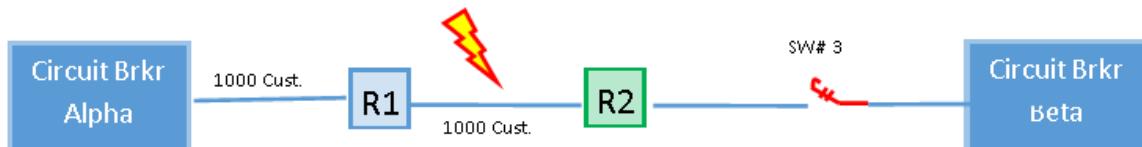
Division 3-15, page 4

Table 3

Far Fault Event Cadence and SAIDI without Reclosers				
Step	Time (Min)	Action	CI	CMI
0	T=0	Alpha CB opens	2,000	-
1	T=30	Entire Line patrolled, SW #1 opened, Alpha CB Closed	1,000	30,000
2	T= 120	SW #1 Closed	-	120,000
		Total CMI	150,000	
		Cs	2,000	
		SAIDI =	75 min	

Example 2B, SAIDI calculation for far fault between reclosers.

For the circuit arrangement with reclosers, the event cadence also changes slightly. R1 opens, the line section between R1 and R2 is patrolled. Once repaired, R1 is closed. The SAIDI calculation remains at 45 minutes. See table 4 below. Note: R1 can be closed remotely by the System Operator, saving the time it takes the line crew to drive back to the recloser. This time savings is not included in the calculation.



[Table 4 begins on next page]

The Narragansett Electric Company  
d/b/a Rhode Island Energy

In Re: Proposed FY 2024 Electric Infrastructure, Safety and Reliability Plan  
21-Month Filing: Period April 2023 – December 2024  
Responses to the Division's Third Set of Data Requests  
Issued on November 23, 2022

---

Division 3-15, page 5

Table 4

Far Fault Event Cadence and SAIDI with Reclosers				
Step	Time ( Min)	Action	CI	CMI
0	T=0	R1 Opens	1,000	-
2	T= 90	Line between R1 and R2 patrolled, Fault repaired, R1 Recloses	-	90,000
			Total CMI	90,000
			Cs	2,000
			SAIDI	45 min