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JOSEPH W. GALLAGHER
VICE PRESIDENT
NUCLEAR SERVICES

SEP 1 5 1988

Docket No.: 50-352

Mr. C. E. Rossi, Director
Division of Operational Events Assessment
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Mail Station P1-137
Washington, DC 20555

Subject:

Limerick Generating Station (LGS) Unit 1
NRC Bulletin 88-05, dated May 6, 1988
"Nonconforming Material Supplied by
Piping Supplies, Inc. (PSI) at Folsom
New Jersey and West Jersey Manufacturing
Company (WJM) at Williamstown, New Jersey"
Supplement 1 to Bulletin 88-05, dated
June 15, 1988

Supplement 2 to Bulfetin 88-05, dated

August 3, 1988

Reference:

S. J. Kowalski (PECo) letter to C. E. Rossi

(USNRC), dated July 22, 1988

Dear Mr. Rossi:

The subject NRC Bulletin, received by Philadelphia Electric Company (PECo) on May 18, 1988, and Supplements 1 and 2, received on June 22, 1988, and August 5, 1988 respectively, require holders of operating licenses to provide a written response within 120 days of receipt of the Bulletin.

The original Sulletin instructed licensees to review purchasing records for suspect materials, assure that materials comply with applicable codes or are suitable for their intended service or replace such material.

Subsequently, Supplement I reduced the scope of the review, established time frames for the testing program, and imposed additional reporting requirements.

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Supplement 2 temporarily suspended activities such as: document review, in-situ testing, and development of justifications for continued operation (JCO's) until further notice.

The enclosed report comprises our complete response to the specific actions delineated by Bulletin 88-05 and the subsequent supplements. The report summarizes the document review, testing, and analytical phases of the 88-05 program; specifies the various actions undertaken during each phase and compiles the results of the material and test data gathered up until the receipt of Supplement 2.

As requested by Supplements 1 and 2, we have transmitted Revision 0 of the material and test data to NUMARC. Rev. 1 of the material and testing database will be transmitted to NUMARC shortly.

If you have questions or require additional information regarding our NRC Bullstin 88-05 program, please do not hesitate to contact us.

Sincerely,

De Bellughan

SAT/vvg/09028305

Enclosure: Report

Copy to: Addressee

W. T. Russell, Ragion I Administrator

T. J. Kenny, LGS Unit 1 Senior Resident Inspector

R. J. Clark, LGS Project Manager

J. W. Gallagher, being first duly sworn, deposes and says:

That he is Vice President of Philadelphia Electric Company; that he has read the foregoing response to NRC Bulletin 88-05 and knows the contents thereof; and that the statements and matters set forth therein are true and correct to the best of his knowledge, information, and belief.

: Campareller

Vice President

Subscribe and sworn to Before me this 15th day of September, 1988.

lotary Public

MELANIE R. CAMPANELLA

Notary Public. Philadelphia, Philadelphia Co. My Cemmission Expires February 12, 1990 LIMERICK GENERATING STATION (LGS)

UNIT 1

RESPONSE TO NRC BULLETIN 88-05

DOCKET NO. 50-352

SEPTEMBER 2, 1988

REV. 0

LIMERICK GENERATING STATION UNIT 1 RESPONSE TO NRC BULLETIN 88-05

PURPOSE:

This report provides a complete response to the requirements set forth by NRC Bulletin 88-05 and Supplements 1 and 2 to the Bulletin. The Bulletin 88-05 required licensees to review purchasing records to determine presence of materials supplied by Piping Supplies, Inc. (PSI) and West Jersey Manufacturing Company (WJM), provide assurance that PSI and WJM supplied materials meet the applicable codes and specification requirements or are suitable for their intended service, or replace unsuitable materials.

This report is intended to fully satisfy the 120-day written response reporting requirements of NRC Bulletin 88-05 as modified by Supplements 1 & 2.

SUMMARY:

In response to the Bulletin and Supplements 1 and 2 requirements, Philadelphia Electric Company (PECo), in accordance with Nuclear Management and Resources Council (NUMARC) guidelines, developed a three-phased program for Limerick Generating Station (LGS) Unit 1.

During Phase I of the program, PECo conducted an extensive review of purchase records for LGS Unit 1 to determine presence of material supplied by PSI and WJM. We have concluded that suspect material has been received at LGS Unit 1. Upon discovery of suspect material, those components determined to be in the warehouse were immediately segregated and placed on hold. Testing had begun for those components determined to be installed and accessible in safety-related systems in accordance with the Testing Program (Phase II) developed under NUMARC guidelines. Supplement 2 suspended in-situ testing before it could be completed for all suspect material identified as installed and accessible in safety-related systems.

As requested by Supplement 1, PECo made 6 calls to the NRC upon discovery of inaccessible suspect flanges or failed flanges. Justification for Continued Operation are being written in accordance with guidelines published by NUMARC (Phase III).

Attachment I to this Report summarizes the results of the document review and testing conducted until August 5, 1988.

Attachments II & III consist of the material and testing database formatted by NUMARC in response to the Bulletin reporting requirements.

SUMMARY DESCRIPTION OF LGS, UNIT 1 NRC BULLETIN 88-05 PROGRAM:

The Limerick Generating Station, Unit 1 NRC Bulletin 88-05 Program is a three-phase program which addresses the following:

- 2 -

Phase I:

Documentation Review

Phase !!

Testina

Phase III:

Analysis of Test Results and Development of Justification for Continued Operation (JCO's)

DOCUMENTATION REVIEW:

(1) Review purchasing records for bulk material purchase of PSI and WJM manufactured/supplied fittings and flanges.

- (2) Review piping subassemblies purchase specification and purchase orders.
- (3) Review skid mounted components purchase specifications.
- (4) Determine Installation status (i.e., location, accessibility, etc.,) via a review of N-5 packages for ASME III piping, Section XI repair and replacement plans, spool installation records and other pertinent installation documentation.

TESTING PROGRAM:

- (1) Develop site specific in-situ testing guidelines in accordance with NUMARC developed guidelines.
- (2) Conduct testing of accessible safety-related suspect material.

ANALYSIS & JCO's:

- Analyze results of testing to determine acceptability of component.
- (2) Write qualitative JCO's for those components that have failed or have been determined to be inaccessible.

The program was developed and monitored in accordance with existing internal PECo procedures and guidelines established by NUMARC for Bulletin 88-05.

The following discusses how the program satisfies the required action Items to be undertaken by the licensee. To assure clarity, the requested actions are restated below along with PECo response to each of these items.

RESPONSE TO BULLETIN & SUPPLEMENTS 1 AND 2 REQUIREMENTS:

(1) Action Requested

Review purchasing records to determine whether any PSI or WUM supplied ASME Code or ASTM material has been furnished. Supplement 1 reduced the scope from "materials" to "fittings and flanges". Supplement 2 identified another affillated company, Chews Landing Metal Manufacturers Incorporated (CLM) who may have supplied suspect materials.

PECo Response

(1) We have completed our review of purchase records for fittings and flanges which may have been purchased from PSI and WUM. The results of the review were incorporated into the material database established by NUMARC. Attachment II provides the results of the document review.

Phase I of LGS Unit 1 Bulletin 88-05 Program provides for the documentation review. In order to utilize our resources more efficiently and to insure that a comprehensive review was conducted, the documentation review was divided into the following three (3) categories:

- A) Bulk Purchase of Suspect Material
- B) Piping Subassemblies and In-Line Components
- C) Skid Mounted Components and Secondary Suppliers

The review of the first two categories has identified 4076 components that were purchased for Limerick Generating Station Units 1 and 2 during the time frame (1976 to present) established by the bulletin. NUMARC, acting on behalf of the industry, coordinated the review for skid mounted components or those supplied by secondary suppliers. Recently, NUMARC provided the list of secondary suppliers and components purchased to affected utilities. We have not completed the review of the above noted list for applicability to LGS. Additionally, we have not completed the review for CLM supplied materials.

(2) Action Requested

For ASME Code and ASTH materials furnished by PSi or WUM that are either not yet installed in safety-related systems at your facility or are installed in safety-related systems of plants under construction, the following actions are requested: (perform action a and either action b or c).

- a. Provide a list of WJM and PSI supplied materials that are found not to be in conformance with the applicable code requirements or procurement specifications and identify the applications in which these materials are used or will be used. Include the material specification, the nature of the component (e.g., pipe flange), size and pressure rating; also indicate the chain of purchase, and either,
- b. Take actions that provide assurance that all received materials comply with ASME Code Section III, ASTM, and applicable procurement specification requirements, or that demonstrate that such materials are suitable for the intended service. For example, this program should include specific verification that austenitic stainless steels have been received in a non-sensitized condition, or,
- c. Replace all questionable fittings and flanges with materials that have been manufactured in full compliance with ASME Code Section III, ASTM, and the applicable procurement specification requirements.

Supplement 1 reduced the scope of the review from "materials" to "fittings and flanges".

P5 Co Response

2a. PECo is a participating member of the NUMARC 88-05
Program. The NUMARC program established the scope of the
documentation review, determined testing priorities for
operating plants, and issued acceptance criteria for
testing to be used by the industry to comply with the
Bulletin's requirements.

NUMARC developed a generic format for the material database to be used by all member utilities. The database includes several fields designating material specification, nature of component, size, pressure rating and chain of purchase.

Attachment II, Rev. 1 contains the results of our documentation review. The original data (Rev. 0) was transmitted to NUMARC on August 18, 1988.

2b. In accordance with NUMARC guidelines, we have developed a well defined, quality assured, testing program to assure conformance of suspect material to applicable codes or to determine acceptability of the suspect material. In addition to the generic material database, NUMARC also created a generic testing database for industry use.

Several guidelines established by NUMARC and accepted by the NRC include:

- Use of the Equotip Hardness Tester for in-situ hardness testing of flanges and fittings.
- For operating plants, field testing priority to be placed on flanges and fittings installed and accessible on safety-related systems.

Our testing program initially focused on installed, accessible safety related components. However to assure adequacy of our testing procedures, testing was conducted on 37 PSI or WJM flanges which were in the warehouse. The data was transmitted to the NRC via the reference letter. Attachment III contains the results of the in-situ hardness testing and chemical testing conducted on fillings from the suspect flanges. Attachment I summarizes the data among Attachments II & III.

2c. The actions described in 2b above preclude any replacement of questionable fittings and flanges. Additionally, PECo will not install components which are suspect.

(3) Action Requested

For ASME Code and ASTM materials furnished by WUM or PSI already installed in safety-related systems in operating plants, the following actions are requested:

- a. Provide a list of the WUM and PSI supplied materials that are found not to be in conformance with the applicable code requirements or procurement specifications and identify the applications in which the materials are used. Include the material specification, the nature of the component (e.g., pipe flange), size, and pressure rating; also indicate the chain of purchase.
- b. Take actions requested in 2b or 2c above. However, an evaluation should be undertaken prior to replacing questionable material in accordance with 2c above that considers the occupational radiation exposure that would be received during the replacement process. This evaluation should be considered in developing the method and timing of material replacements.
- c. Document and maintain for inspection a basis for continued plant operation if the program requested in item 3b has not been completed within 120 days of the date of receipt of this bulletin.

Supplement 1 reduced the scope of paragraph 3 of Bulletin 88-05 from ASME and ASTM "materials" to ASME and ASTM "flanges and fittings". For ACME and ASTM flanges and fittings furnished by PSI and WJM already installed in safety-related systems in operating plants, the following actions are requested by Supplement 1:

- Commence appropriate testing of accessible flanges and fittings promptly to identify conformance of materials to ASME and ASTM material specifications. Test results for flanges and fittings reported to be from the same heat should be compared for consistency and for conformance to the ASME/ASTM specifications and to values listed on material CMTRs. Any deviation from the specification requires an appropriate analysis justifying continued operation.
- If any Inaccessible flanges or fittings are identified, b. an analysis must be performed justifying continued operation.
- All other provisions of paragraph 3 of Bulletin 88-05 remain in effect.

Supplement 2 temporarily suspended the above listed activities.

PECo Response

3a) As stated in item 2 above, we have developed a list of suspect materials. The conformance of suspect materials to the applicable material specification was being determined via the testing program. Thus far, we have developed and implemented a well defined, quality assured, testing program for in-situ testing of suspect materials in accordance with existing internal PECo procedures and seneric NUMARC guidelines.

As noted earlier, we have sent NUMARC material and test data to conduct the appropriate comparisons. Attachments 11 and III contain the newly revised material and test data which will be transmitted to NUMARC scon. There are 209 suspect flanges installed in safety related systems at LGS Unit 1. 44 flanges have been tested by using Equotip Hardness Tester. 8 flanges failed due to high hardness (greater than 187 BHN); 5 flanges failed due to low hardness (less than 137 BHN). We notified the NRC of the 13 failed flanges within the allocated time frame established by Supplement 1.

3b) In addition to the 13 failed flanges, we have identified three inaccessible flanges installed in safety related systems. We notified the NRC of the inaccessible flanges within the allocated time frame established by Supplement 1. Justifications for continued operation have been written for two inaccessible flanges. Despite the temporary suspension of field activities we are completing our efforts to develop JCO's for inaccessible or failed flanges found to date to close our internal records. As requested by Supplement 1, the JCO's will be filed and maintained for inspection.

(4) Action Requested

For any PSI and WUM supplied materials having suspect CMTRs and used in systems that are not safety-related, take actions commensurate with the function to be performed.

Supplement 1 provides the following instructions:

For flange, and fittings already identified as having been supplied by PSI or WUM, the actions requested in 3a and 3b above are to be completed within 30 days of receipt of this supplement. For flanges and fittings identified after receipt of this supplement, the actions requested in 3a and 3b above are to be completed within 30 days of identifying the flanges or fittings as being supplied by PSI and WUM.

Supplement 2 temporarily suspended the above listed activities for operating plants.

PECo Response

We have completed testing of those flanges already identified as accessible and installed in safety-related systems within the time frame established by Supplement 1. A higher priority on safety-related systems precluded any testing on non-safety-related suspect flanges prior to the temporary suspension of field activities.

(5) Action Requested

Addressees are requested to retain nonconforming materials and maintain for inspection the documentation of the specific actions taken for the identified materials until advised further by the NRC. Nonconforming materials should be segregated to ensure that they are not inadvertently used.

PECo Response

We have segregated and retained the suspect materials as requested above. Documentation pertaining to the specific actions undertaken for the identified materials will be maintained for inspection.

(6) Action Requested

For operating plants, all scheduled actions should be completed before a restart from the next major outage starting after 180 days from the date of receipt of this bulletin. For plants under construction all scheduled actions and the reporting required by 2 below should be completed prior to the planned fuel load date. If any addressee cannot meet this schedule, they should justify to the NRC their proposed alternative schedule.

Supplements 1 & 2 further instruct:

Addressees are encouraged to report the soults of tests of PSI and WUM supplied flanges and fittings to the INPO Nuclear Network for dissemination to the Industry.

PECo Response

As noted earlier, the material and test results (Rev. 0) have been sent to NUMARC. Rev. 1 of the material and test results will also be transmitted to NUMARC. This report satisfies the required 120 day written response requested by the NRC.

ATTACHMENT I

SUMMARY OF DOCUMENT REVIEW AND TEST RESULTS

	No.
Suspect Components Purchased for LGS Units 1 and 2	4076
Suspect Flanges Installed in Safety-Related Systems at LGS Unit 1	209
Flanges Tested/Accessible and Installed in Safe , Related Systems	44
Failure Due to High Hardness (greater than 187 BHN)	8
Failure Due to Low Hardness (less than 137 BHN)	5
Inaccessible Flanges	3

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ATTACHMENT II

MATERIAL DATABASE

FOR

LIMERICK GENERATING STATION UNIT 1

LEGEND:

GA: Guyon Alloys

SPS: Standard Pipe Supply

LPC: Lewis P. Canuso ITT: ITT Grinnell

CP: Consolidated Power

Pt	LANT	U LINE N ITEM	T DIAM	0	RATING TYPE	5	GR)	ADE	S	HEAT LOT	CMTR DATE	V SO RCE	SUPPLY 1	AN
		1	A	M					H			N		# A
		T	N	M		,			D			D		F
	GS	1 0001	1.00	10000			5 SA	-105	160	834	06-17-82		SPS	2 4
	GS	1 0002	1.00		900 RF,					8345	06-17-82		SPS	2 Y
	GS	1 0003	1.00					-105		8345	06-17-82		SPS	3 4
	GS	1 0004	1.00					-105		8345	06-17-82		SPS	, ¥
	GS	1 0005	2.00					-105		GDFR	05-24-82		SPS	2 1
	GS	1 0006	2.00		150 RF,			-105		GDFR	05-24-82		SPS	2 Y
	GS	1 0007	1.00					-105	22.525	53596	08-13-86		LPC	2 4
	GS.	1 0008	1.00		150 RF,	SW 105		-105		M922601	02-10-83		CAF	7 Y
	GS	1 0009		FLG	150 RF,	SW 105		-105		M922601	02-10-83		CAP	2 .
	GS.	1 0010	1.00			SM 105		-105		A79	04-29-81		GA	2
	SS	1 0011	1.00		150 RF,			105		A79	04-29-81		GA	2 Y
	GS.	1 0012	1.00					-105		A79	04-29-81		GA	2 Y
	GS GS	1 0013	1.00					-105 -105	100000	M922601 M922601	02-10-83		CAP	2 Y
	ez ez	1 0015	16.00					-105		ETMF	02-10-83 05-10-82		SPS	2 4
	GS.	1 0016	16.00					-105		223608	07-03-84		GA.	2 Y
	GS.	1 0017	16.00					-105		ETMF	05-10-82		SPS	2 Y
	GS	1 0018	1,00					-105		A79	04-29-81		GA	2 Y
	GS	1 0019	1.00		150 RF.			-105	1322	A79	04-29-81		GA	2 Y
	GS	1 0020	2.00					-105		GDFR	05-24-82		SPS	2 Y
	GS	1 0021		FLG		SM 105	_	-105		GDFR	05-24-82		SPS	2 Y
	GS	1 0022	1.00		150 RF,	SW 105		-105		A79	04-29-81		GA	2 Y
	GS	1 0023	1.00		150 RF.	SW 105		-105		A79	04-29-81		GA	2 Y
L	GS.	1 6024	2.00			SW 105	S SA	-105	80	GDFR	05-24-82	MLW W	SPS	2 Y
L	GS	1 0025	2.00	FLG		SW 105		-105		GDFR	05-24-82		SPS	2 Y
Li	GS	1 0026	2.00	FLG	150 RF,	SW 105	S SA	-105	80	GDFR	05-24-82	MLW W	SPS	2 Y
Li	GS	1 0027	2.00	FLG	150 RFM	SW 105	S SA	- 105	80	GDFR	05-24-82	MLW W	SPS	2 Y
1,1	GS -	1 0028	6.00	FLG	150 WN,	RF 105	5 SA	-105	40	GD18	05-24-82	MLW W	SPS	2 Y
	GS	1 0029	6.00				S SA	-105		GD18	05-24-82		SPS	2 Y
	GS.	1 0030	6.00					-105		GD I B	05-24-82		SPS	2 Y
	GS.	1 0031	6.00					-105		CND	01-09-86		LPC	2 Y
	GS	1 0032	1.25					-105		GDDF	08-04-81		SPS	2 Y
	GS	1 0033		FLG				-105		GD0F	08-04-81		SPS	2 Y
	GS -	1 0034		FLG				-105		GDDF	08-04-81		SPS	2 Y
	GS .	1 0035		FLG				-105		GDDF	08-04-81		SPS	2 Y
	GS.	1 0036		FLG		SW 103		-105		58F	04-29-81		GA	2 Y
	GS	1 0037	1.25	FLG		SW 103		-105		GDDF	08-04-81		SPS	2 Y
	GS GS	1 0039		FLG		5W 100		-105		GDD F	08-04-8		* 25	2 Y
	GS.	1 0040	20.00					-105		GDDF 12432	08-04-8 10-17-8		SPS	2 Y
	65	1 0041	14.00					-105		11913	03-31-8		GA	2 Y
	GS .	1 0042	14.00					- 105		5183	03-31-83		GA	2 Y
	GS.	1 0043	4.00					-105		7565	01-21-83		SPS	2 Y
	GS	1 0044	4.00					-105		7565	01-21-8		SPS	2 Y
	CS.	1 3045	4.00					-105		22073	06-02-82		GA	2 4
1967	GS	1 0046		FLG				-105		22073	06-02-8		GA	2 Y

PLANT	U LINE N ITEM I T	T R A N	DIAM	0 6	RATING	TYPE		S P E C	GRADE	S C H D	HEAT LO	T	CMTR DATE	V SOURCE E N D	SUPPLY	A N S C M A E
LGS	1 0047		1.00	FLG	600	RF,	SW	105	SA-105	160	GDKD		05-10-82	M MIM M	SPS	2 Y
LGS	1 0048		3.00	FLG		WN,		105	SA-105	- 1	2578		11-19-79	W WJM	111	2 Y
LGS	1 0049		20.00	FLG	150	WN,	RF	105	SA-105	2	12432		10-17-83	W WJM	LPC	2 Y
LGS	1 0050		30.00	FLG	150	WN.	RF	105	SA-105	20	10707		08-18-82	M MIM M	SPS	2 Y
LGS	1 0051		4.00	FLG	150	WN,	RF	105	SA-105	40	GDSW		06-02-82	W WJM	GA	2 Y
LGS	1 0052		0.75		600	RJ,		105	SA-105	160	44266		01-07-83	M WJM	SPS	2 Y
LGS	1 0053		0.75			RJ.		105	SA-105	160	44266		01-07-83		SPS	2 Y
LGS	1 0054		1.00			RF,			SA-105		M922601		02-10-83		CAP	2 Y
LGS	1 0055		1.00			RF,			SA-105		M922601		02-10-83		CAP	2 Y
LGS	1 0056		0.75			RJ,			SA-105		44266		01-07-83		SPS	2 Y
LGS	1 0057		0.75			RJ,	SW		SA-105		44266		01-07-83		SPS	2 Y
LGS	1 0058		0.75		600	RJ,	SW		SA-105		44266		01-07-83		SPS	2 Y
LGS	1 0059		0.75		150	RF.	SM.		SA-105	160			04-29-81		GA	2 Y
LGS	1 0060		0.75			RF,			SA-105	160			04-29-81		GA	2 Y
LGS	1 0061		0.75			RF.			SA-105	160			04-29-81		GA	2 Y
LGS	1 0062		3.00			RF.			SA-105	160			04-29-81		GA ITT	2 Y
						WN,			SA-105		2578		11-19-79			2 Y
LGS	1 0064		2.00			WN,	EL.		SA-105		GD8W		06-92-82 10-20-86		GA GA	2 Y
LGS	1 0065		2.00		150	RF.	STA .		SA-105 SA-105		COX		10-20-86		GA	2 4
LGS	1 0067		2.00			RF,			SA-105		COX		10-20-86		GA	2 4
LGS	1 0068		2.00			RF.			SA-105		COX		10-20-86		GA	2 4
LGS	1 0069		2.00			RF.			SA-105		COX		10-20-86		GA	2 4
LGS	1 0070		2.00	-7,000		RF,			SA-105		COX		10-20-86		GA	2 Y
LGS	1 0071		3.00			WN.			SA-105		T2043		06-05-79		ITT	2 4
LGS	1 0072		3.00			WN.			SA-105		T2043		06-05-79		III	2 Y
LGS	1 0073		6.00			WN.			SA-105		GD I B		05-24-82		SPS	2 4
LGS	1 0074		6.00	FLG		WN.			SA-105		GD18		05-24-82		SPS	2 Y
LGS	1 0075		6.00	FLG	150	WN.	RF	105	SA-105	40	GD 18		05-24-82	W WJM	SPS	2 Y
LGS	1 0076		6.00	FLG	150	WN.	RF	105	SA-105	40	GD18		05-24-82	M MIM M	SPS	2 Y
LGS	1 0077		1.00	FLG	300	RF,	SW	105	SA-105	80	GDKG		08-02-82	M MIM M	SPS	2 Y
LGS	1 0076		3.00			WN,		105	SA-105	1	2578		11-19-79	W WJM	177	2 Y
LGS	1 0079		4.00			WN,		105	SA-105	40	GDSW		06-02-82	W WJM	GA	2 Y
LGS	1 0080		1.00			RF.			SA-105		A79		04-29-81		GA	2 Y
LGS	1 0081		1.00			RF.			SA-105		A79		04-29-81		GA	2 Y
LGS	1 0082		1.00			RF,			SA-105		M922601		02-10-83		CAP	2 Y
1.75	1 0083		6.00			WN,			SA-105		CD 18		05-24-82		SPS	2 Y
LGS	1 0084	-	6.00			WN,			SA-105		GD 18		05-24-82		SPS	2 Y
LGS	1 0085	C	6.00			WN,			SA-105		GD18		05-24-82		SPS	2 Y
res	1 0086		6.00			WN,			SA-105		CDIB		05-24-82		SPS	2 Y
LGS	1 0087		1.00			RF,			SA-105		GDKG		08-02-82		SPS	2 Y
LGS	1 0088		3.00			WN,			SA-105		T2043		06-05-79		.11	2 Y
LGS	1 0089		3.00			WN,			SA-105		T2043		06-05-79		111	2 Y
LGS	1 0090		3.00			WK.			SA-105		12043		06-05-79		111	2 ¥
LGS	1 0091		3.00			WN,			SA-105		12043		06-05-79		111	2 Y
LGS	1 0092		0.75	7 6.50	130	RF.	386	103	SA-105	160	096		04-29-81	M MUM	GA	2 Y

PLANT	U LINE N ITEM	T R	DIAM C	RATING TYPE	S GRADE	S HEAT LOT	CMTR	V SOURCE E	SUPPLY 1	AN
	1	A	×		E	h		N		MA
	Ŧ	×	ĸ		c	0		D		E
LGS	1 0093		0.75 FLG	150 RF, SW	105 SA-105	160 64C	04-29-81	U UJM	GA	2 Y
LGS	1 0094		1.25 FLG	150 RF, SW	105 34-105	80 GDDF	08-04-81		SPS	2 Y
LGS	1 0095		1.25 FLG	150 RF, SW	105 SA-105	80 GDDF	08-04-81	M MIM M	SPS	2 Y
LGS	1 0096		2.00 FLG		105 SA-105	80 GDFR	05-24-82	W WJM	SPS	2 Y
LGS	1 0097		2.00 FLG	150 RF, SU	105 SA-105	80 GDFR	05-24-82	M MIM M	SPS	2 Y
LGS	1 0098		0.75 FLG		105 SA-105	160 64C	04-29-81		GA	2 Y
LGS	1 0099		0.75 FLG		105 SA-105	160 64C	04-29-81		GA	2 Y
LGS	1 0100		0.75 FLG		105 SA-105	160 64C	04-29-81		GA	2 Y
LGS	1 0101		0.70 FLG	150 RF, SW	105 SA-105	160 64C	04-29-81		GA	2 Y
LGS	1 0102		0.75 FLG		105 SA-105	160 64C	04-29-81		GA	2 Y
LGS	1 0103		0.75 FLG		105 SA-105	160 64C	04-29-81		GA	2 Y
LGS	1 0104		0.75 FLG	150 RF, SN	105 SA-105	160 64C	04-29-81		GA	2 Y
LGS	1 0105		0.75 FLG		105 SA-105	160 64C	04-29-81		GA	2 4
LGS	1 0106		1.25 FLG	150 RF, SW	105 SA-105	80 GDDF	08-04-81		SPS	2 Y
LGS	1 0107		1.25 FLG	150 RF, SW	105 SA-105	80 GDDF	08-04-81	The second second	SPS	2 Y
LGS	1 0108		1.00 FLG	150 RF, SW	105 SA-105	80 M922601	02-10-83		CAP	2 Y
LGS	1 0109		1.00 FLG	150 RF, SW	105 SA-105	80 M922601	02-10-83		CAP	2 Y
LGS	1 0110		1.00 FLG		105 SA-105	160 834	06-17-82		SPS	2 Y
LGS	1 0111		1.00 FLG 1.00 FLG		105 SA-105 105 SA-105	160 B34 160 B34	06-17-82		SPS	2 Y
LGS	1 0113		0.75 FLG	900 RF, SW	105 SA-105	160 GDDE	06-17-82		SPS	
LGS	1 0114		0.50 FLG		105 SA-105	3 44266	01-07-83		SPS	2 Y
LGS	1 0115		0.50 FLG		105 SA-105	3 44266	01-07-83		SPS	2 Y
LGS	1 0116		6.00 FLG		105 SA-105	40 114A9	02-13-81		GA	2 Y
LGS	1 0117		0.75 FLG		105 SA-105	160 64C	04-29-81		GA	2 Y
LGS	1 0118		0.75 FLG		105 SA-105	160 64C	04-29-81		GA	2 Y
LGS	1 0119		0.75 FLG		105 SA-105	160 64C	04-29-81		GA	2 Y
LGS	1 0120		0.75 FLG	150 RF, SW	105 SA-105	160 64C	04-29-81		GA	2 Y
LGS	1 0121		0.75 FLG	150 RF, SW	105 SA-105	160 64C	04-29-81		GA	2 Y
LGS	1 0122		0.75 FLG	150 RF, SW	105 SA-105	160 64C	04-29-81		GA	2 Y
LGS	1 0123		0.75 FLG	150 RF, SM	105 SA-105	160 64C	04-29-81	W WJM	GA	2 Y
LGS	1 0124		0.75 FLG	150 RF, SW	105 SA-105	160 64C	04-29-81	W WJM	GA	2 Y
LGS	1 0125		1.25 FLG	150 RFM SW	105 SA-105	80 GDDF	08-04-81		SPS	2 Y
LGS	1 0126		1.25 FLG		105 SA-105	80 GPOF	08-04-81		SPS	2 Y
LGS	1 0127		1.25 FLG		105 SA-105	80 GDDF	08-04-81		SPS	2 Y
LGS	1 0128		1.25 FLG		105 SA-105	80 -30F	08-04-81		SPS	2 Y
LGS	1 0129		4.00 FLG		105 SA-105	40 GDBW	06-02-82	UTTO TOTAL TO	GA	2 Y
LGS	1 0130		6.00 FLG		105 SA-105	1 CND	01-09-86		LPC	2 Y
LGS	1 0131		6.00 FLG		105 SA-105	40 GD1B	05-24-82		SPS	2 Y
LGS	1 0132		6.00 FLG		105 SA-105	40 GD18	05-24-82		SPS	2 Y
LGS	1 0133		6.00 FLG	The second second	105 SA-105	40 GD18	05-24-82		SPS	2 Y
LGS	1 0134		6.00 FLG		105 SA-105	2 17508	06-01-83		GA	2 Y
LGS	1 0136		6.00 FLG 6.00 FLG		105 SA-105 105 SA-105	40 GD18 2 17508	05-24-82		SPS GA	2 Y
LGS	1 0137		6.00 FLG		105 SA-105	2 17508	06-01-83		GA	2 Y
LGS	1 0138		30.00 FLG		105 SA-105	20 10707	08-18-82		SPS	2 Y
200	0.00		20.00 100	120 800, 10	102 an 103	400 100	20.10.05		ar a	4.5

PLANT	U LINE N ITEM 1 T	T DI R A N	AM C O M	RATING	TYPE	S P E C	GRADE	S HEAT LO	T CMTR DATE	V SOURCE E N D	SUPPLY 1	A N S C M A E
LGS	1 0132		00 FLG		UN, RF		SA-105	2 223608	07-03-84		GA	2 Y
LGS	1 0140		00 FLG		WN, RF		SA-105	2 223608	07-03-84		GA	2 Y
LGS	1 0141		00 FLG		WN, RF		SA-105	40 4660	11-23-81		SPS	2 Y
LGS	1 0142		00 FLG		WN, RF		SA-105	40 4660	11-23-81		SPS	2 Y
LGS	1 0143		00 FLG		WN, RF		SA-105	40 4660	11-23-81		SPS	2 Y
LGS	1 0144		00 FLG		WN, RF		SA-105	40 4660	11-23-81		SPS	2 Y
LGS	1 0145		00 FLG		WN, RF		SA-105	40 4660	11-23-81		SPS	2 Y
LGS.	1 0146		00 FLG		WN, RF		SA-105	40 4660	11-23-81		SPS	2 Y
LGS	1 0148		00 FLG		WN, RF		SA-105	40 4660	11-23-81		SPS	2 Y
LGS	1 0149		00 FLG		WN, RF		SA-105 SA-105	40 4660 40 ETPT	11-23-81		SPS	2 Y
LGS	1 0150		00 FLG		WN, RF		SA-105	40 4660	11-23-31		SPS	2 Y
LGS	1 0151		00 FLG		WN, RF		SA-105	40 ETPT	05-24-82		SPS	2 4
LGS	1 0152		00 FLG		UN, RF		SA-105	40 4660	11-23-81		SPS	2 4
LGS	1 0153		00 FLG		RF, SW		SA-105	80 GDFR	05-24-82		SPS	2 Y
LGS	1 0154		00 FLG		RF, SW		SA-105	80 GDFR	05-24-82		SPS	2 Y
LGS	1 0155		00 FLG		RF, SW		SA-105	160 64C	04-29-81		GA	2 Y
LGS	1 0156		00 FLG	150	RF, SM		SA-105	160 64C	04-29-81		GA	2 Y
LGS	1 0157		00 FLG		RF, SW		SA-105	80 A79	04-29-8		GA	2 Y
LGS	1 0158	1.	00 FLG		RF, SW		SA-105	80 A79	04-29-81		GA	2 Y
LGS	1 0159	1.	25 FLG		RF, SW	105	SA-105	80 GDDF	08-04-81		SPS	2 4
LGS	1 0160	1.	25 FLG	150	RF, SW	105	SA-105	80 GDDF	08-04-81	W WJM	SPS	2 Y
LGS	1 0161		00 FLG		WN, RF		SA-105	40 GD13	05-24-82		SPS	2 4
LGS	1 0162		00 FLG		BLD		SA-105	2 17508	06-01-83		GA	2 Y
LGS	1 0163		00 FLG		WN, RF		SA-105	2 12432	10-17-83		LPC	2 Y
LGS	1 0164		00 FLG		WN, RF		SA-105	2 12432	10-17-83		LPC	2 Y
LGS	1 0165		00 FLG		BLG		SA-105	2 17508	06-01-83		GA	2 Y
LGS	1 0166		00 FLG		SLD		SA-105	2 17508	06-01-83		GA	2 Y
LGS	1 0167		00 FLG		BLD		SA-105	2 17508	06-01-83		SA	2 4
LGS	1 0169		00 FL0		WN, RF		SA-105 SA-105	2 17508 40 GD18	06-01-83		GA	2 Y
LGS	1 0170		00 FLG		BLD .		SA-105	2 17508	05-24-82 06-01-83		SPS GA	2 Y
L63	1 0171		00 FLG		WN, RF		SA-105	40 GD18	05-24-8		SPS	2 4
LGS	1 0172		00 FLG		BLD		SA-105	2 17508	06-01-8		GA	2 Y
LGS	1 0173		00 FLG		WN, RF		SA-105	40 GD18	05-24-82		SPS	2 4
LGS	1 0174		00 FLG		BLD		SA-105	2 17508	06-6. 33		GA	2.4
LGS	1 0175		00 FL0		WN, RF		SA-105	40 GD18	05-24-82		SoS	2 Y
LGS	1 0176		00 FL6		BLD		SA-105	2 17508	06-01-83		GA	2 4
LGS	1 0177		75 FLG		RJ, OR		SA-105	160 44266	01-07-83		SPS	2 Y
LGS	1 0178		75 FLG		RJ, OR	27 (27.00)	SA-105	160 44266	01-07-83		SPS	2 Y
LGS	1 0179		75 FLG		RJ, OR		SA-105	160 44266	01-07-83		SPS	2 Y
LGS	1 0180	0.	75 FLG		RJ, OR		SA-105	160 44266	01-07-03		SPS	2 Y
LGS	1 0181		75 FLG		RJ, OR	105	SA-105	160 44266	01-07-83		SPS	2 Y
LGS	1 0182	0.	50 FL0	600	RJ, OR	105	SA-105	3 44266	01-07-83	MLW W	SPS	2 Y
LGS	1 0183		50 FL0		RJ, OR		SA-105	3 44266	01-07-83		SPS	2 Y
LGS	1 0184	2.	00 FL6	150	RF, SW	105	SA-105	80 GDFR	05-24-82	M MIM M	SPS	2 Y

PLANT	U LINE N ITEM I T	T R A N	DIAM C O M M	RATING T	TPE	S GRAN	E S HEAT C H D		MTR V ATE E		SUPPLY 1	AN
LGS	1 0185		2.00 FLG	150 R	F, SW	105 SA-1	05 80 GDFR	0	5-24-82 W	NIN .	SPS	2 Y
LGS	1 0186		2.00 FLG	150 R	SW	105 SA-1	05 80 GDFR	0	5-24-82 W	MUM :	SPS	2 Y
LGS	1 0187		2.00 FLG	150 R	F, SW	105 SA-1	05 80 GDFR	0	5-24-82 W	MLW I	SPS	2 Y
LGS	1 0188		2.00 FLG	150 R	F. SW	105 SA-1	05 80 GDFR	0	5-24-82 W	MLW I	SPS	2 Y
LGS	1 0189		2.00 FLG	150 R	F, SW	105 SA-1	05 80 GDFR	0	5-24-52 V	MLW I	SPS	2 Y
LGS	1 0190		2.00 FLG		F, SW	105 SA-1	The second secon		5-24-82 k		SPS	2 Y
res	1 0191		2.00 FLG		F, SW	105 SA-1			5-24-82 W		SPS	2 Y
LGS	1 0192		2.00 FLG			*05 SA-1			5-24-82 W		SPS	2 Y
LGS	1 0193		1.00 FLG	150 F	SW.	105 SA-1			4-29-81 k		GA	2 Y
LGS	1 0194		1.25 FLG		F, SW	105 SA-1			8-04-81 L		SPS	2 Y
LGS	1 0195		2.00 FLG			105 SA-1			5-24-82 4		SPS	2 Y
res	1 0196		6.00 FLG			105 SA-1			5-24-82 8		SPS	2 Y
LGS	1 0197		0.75 FLG 0.75 FLG			105 SA-1			4-29-81 k		0	2 Y
LGS	1 0199		3.00 FLG			105 SA-1 105 SA-1			4-29-81 W		SPS	2 Y
LGS	1 0200		3.00 FLG			105 SA-1	The second second		5-24-82 k 5-24-82 k		SPS	2 i
LGS	1 0201		3.00 FLG			105 SA-1		0	5-24-82		SPS	2 Y
LGS	1 0202		3.06 FLG			105 SA-1			5-24-82 W		SPS	2 4
LGS	1 0203		18,00 FLG			105 SA-1			5-01-86 k		LPC	2 Y
LGS	1 0204		18.00 FLG			105 SA-1			5-01-86 k		LPC	2 Y
LGS	1 0205		18.00 FLG			105 SA-1			5-01-86 k		LPC	2 Y
LGS	1 0206		18.00 FLG			105 SA-1			5-01-86 W		LPC	2 ¥
LGS	1 0207		18,00 FLG			105 SA-1			2-06-87 W		LPC	2 Y
LGS	1 0208		18.00 FLG			105 SA-1			2-06-87 W		LPC	2 4
LGS	1 0209		18.00 FLG	300 ₩	N, or	105 SA-1	05 1 9772		5-01-86 W		LPC	2 Y
LGS	1 0210		18.00 FLG			105 SA-1	05 1 9772	0	5-01-86 k	MUM .	LPC	2 Y
LGS	1 0211		1.00 FLG		F, SW	105 SA-1	05 80 5359	6 0	8-13-86 W	MLW 1	LPC	2 Y
LGS	1 0212		1.00 FLG		F, SW	105 SA-1	05 80 5359	6 0	8-13-86 W	MLM I	LPC	= Y
LGS	1 0213		1.00 FLG	150 R	F, SW	105 SA-1	05 80 4922		2-10-83 W		CAP	2 Y
LGS	1 0214		1.00 FLG		F, SM	105 SA-1	05 80 M922	601 0	2-10-83 6	MLW I	CAP	Z Y
LGS	1 0215		1.00 FLG	150 R	F, SW	195 SA-1	05 80 5359	6 0	8-13-86 4	MLM I	LPC	2 Y
LGS	1 0216		0.75 FLG		F, SW	105 SA-1	The second secon		4-29-81 k		GA	2 Y
Fez	1 0217		0.75 FLG		F, SW	105 SA-1			4-29-81 k		GA	2 Y
LGS	1 0218		0.75 FLG		F, SW	105 SA-1			4-29-61 k		GA	2 Y
LGS	1 0219		0.75 FLG	150 R	F, SW	105 SA-1			4-29-81 k		GA.	2 Y
LGS	1 0220		1.00 FLG	150 R	F, S₩	105 SA-1	The second secon		2-10-83 k		CAP	2 Y
LGS	1 0221		1.00 FLG		F, SW	105 SA-1			2-10-83 N		CAP	2 Y
LGS	1 0222		1.00 FLG		F, SW	105 SA-1			2-10-83 6		CAP	2 Y
LGS	1 0223		1.00 FLG		r, SW	105 SA-1	Control Control Control Control		2-10-83 1		CAP	2 Y
LGS	1 0225		1.00 FLG			105 SA-1			2-16-83 V		CAP	2 Y
LGS	1 0226		1.00 FLG		F, SW	105 SA-1	The second second		12-10-83 W		CAP	2 Y
LGS	1 0227		1.00 FLG			105 SA-1			12-10-83 k		CAP	2 Y
LGS	1 0228	0	1.00 FLG		F, SW	105 SA-1			2-10-83 k		CAP	2 Y
LGS	1 0229	Ē	1.00 FLG			105 SA-1			2-10-83		CAP	2 Y
LGS	1 0230	-	1.00 FLG		F, SM	105 SA-1			2-10-83 1		CAP	2 Y
-	-		1100 160	100 10		100 300	No. 1176.6		. 10 00		- Land	

Page No. 09/12/88 REV.1

PLANT		Ī	DIAM	C	RATING	TYPE		S	GRADE	S	HEAT LOT	CMTR	٧	SOURCE	SUPPLY		
	N ITEM			0								DATE				S	-
		*		M						H			N			M	A
	Ŧ	N		M				C		D			D			E	
LGS	1 0231		1.00	FLG	150	RF.	SW	105	SA-105	80	M922601	02-10-83	T	TF	CAP	2	Y
LGS	1 0232	2	1.00			RF.			SA-105		A79	02-10-83			CAP	2	
LGS	1 0233		1.00				SW		SA-105		M922601	02-10-83	-		CAP	2	Y
LGS	1 0234		1,00				SW		CA-105		M922601	02-10-83			CAP	2	Y
LGS	1 0235		1.00				SW		SA-105		M922601	02-10-83			CAP	2	Y
LGS	1 0236		10.00				OR		SA-105		217538	04-04-86			CAP	2	
LGS	1 0237		2.00				SW		SA-105		COX	10-20-86			GA	2	Y
LGS	1 0238		2.00				SW		SA-105		COX	10-20-86			GA	2	
LGS	1 0239		1.00				SW		SA-105		A79	04-29-81			GA	2	
LES	1 0240		1.00			RF.			SA-105		M922601	02-10-83	-		CAP		
LGS	1 0241		1.00				SW		SA-105		834	06-17-82			SPS	2	¥
LGS	1 0242		6.00				FF		SA-105		11449	02-13-81			GA	2	Y
LSS	1 0243		1.00			FF,			SA-105		A-79	04-29-81			GA	2	
LGS	1 0244		3.00			BLD	-		SA-105		816K	10-01-81			SPS	2	
LGS	1 0245		3.00						SA-105		816K	10-01-81			SPS	2	
LGS	1 0246		3.00			BLD		7.00	SA-105		816K	10-01-81			SPS	2	
LGS	1 0247		3.00			BLD			SA-105		816K	10-01-81			SPS	2	
LGS	1 0248		3.00			BLD		200	SA-105		816K	10-01-81			SPS	2	
LGS	1 0249		3.00			BLD			SA-105	100	816K	10-01-81	-	Control of the Control	SPS	2	
LGS	1 0250	A	2.00				н	-	SA-105		CFY-8602	02-03-84			GA	2	¥
LGS	1 0251	A	2.00				TH		SA-105		CFY-8602	02-03-84			GA	2	¥
LGS	1 0252	A	2.00				TH		SA-105		CFY-8602	02-03-84			GA	2	¥
LGS	1 0253	A	2.00				TH		SA-105		CFY-8602	02-03-84	1000		GA	2	
	- 04.73	-	2.00		120	***		102	JM 193	-	CLI OUNC	DE 03 04	-	-	- Con	-	

ATTACHMENT III

TESTING DATABASE

FOR

LIMERICK GENERATING STATION UNIT 1

LEGEND:

HARD: Estimated Brinnell Hardness Number

T CHM P T MLYB P CORRECTED	VALUE	0.00	0.00	00.00	0.00	0.00	00.0	0.00	00.00	0.00	00.00	00.00	400.84	479.08	0.00	0.00	00.0	0.00	0.00	0.00	0.00	00 0	30	0.00	0.00	00.00	464.06	0.00	0.00	0.00	0.00	0.00	00.00	0.00	0.00	00.00	0.00	Acres 1
T MLY8 P		0.000	0.000	0.000	0.000	0.000	0.000	0.000	00000	0.000	0.900	0.000	0.110	0.210	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.230	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2000000
T_CHM_P		0.000	0.000	0.000	0.000	0.000	0 000	0.000	0.000	0.000	0.000	0.000	0.170	0.310	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.100	0.000	0.000	0.000	0,000	0.000		0.000	0.000	0.000	0.000	20000
T_SIL_P		0.000	0.000	0.000	0000	0.000	0000	0.000	0.000	0.000	0.000	0.000	0.080	0.200	0.000	0.000	0 000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.090	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2000
CAR P T MAN P T SIL P		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.050	1.000	0.000	0.000	0.000	0.000	0.000	0,000	0.000	0.000	0.000	0.000	0.000	0.000	0.950	0.000	0.000	0.000	0.000	0.000	0,000	0.000	0.000	0.000	0.000	A Charles
T CAR P		0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.164	0.340	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000			0.000	0.000	0.000	0.000	0.000	0.000	0.000	ALC: NO.
- 10		00	0	0	0	00	0 0	0	0	0.0	0 0	9 0	140	202	0	0 0	0 0	0	0	٥ (9 0	0	0	00	0.0	0	190	0	0	0	5 0	0	0	0 0	0 0	0	00	1
be 2	t oc	00	0	¢2	0	D 4	9 0	0	0	0 (0.0	9 0	0	0	0	(D) (E)	9 0	0	0	0 1	9 0	0	0	0.0	5 0	0	0 0	9 0	0	0	0.0	0 0	Ö	9.6	0 0	0	0.0	
j= 3	t w	00	0	0	0	D: 0	5-C	0	0	0	0 0	0 0	0	0	0	00	0 0	0	0	0 (o d	0	0.1	0 0	0 0	0	0.0	0.0	ø	0	D 6	9 6	0	G) Q	5 00	0	00	ķ:
TEN S T YLD S		0.0	0	0	0	00	9 0	0	0	0	0 0	0 0	0	9	0	0 0	9 0	0	0	0 0	0 0	0	0	0 4	0 0	0	0 0	0	0	0	0 0	00	0	0 0	0	0	0.0	
bee.	. 4 2	00	0	0	0	0.0	0	0	0	0	0.0	9 00	0	0	0	00	9 0	0	0	0 0	9 6	0	0	0 0	0 0	0	00	00	0	0	0 4	00	0	0.0	0	0	0.0	
T U LINE		0000	00003	7000	9000	0000	0000	6000	00100	0011	2100	0014	0015	0016	0017	0018	0030	0021	0022	5200	00025	0026	0027	9700	00000	0031	0032	003%	00355	0036	0037	0039	0700	0041	0073	7700	9065	
PLANT																																						

Page No. 09/12/88 REV. 1

PLANT

NUMARC DATA SENT 9/15/88 DATABASE NRCT.08F LGS UNIT 1

TITEN SIYLD SITITICAR PINAN PISL PICHM PIMLYB P CORREC

ORRECTED L VALUE	00.00 00
T_MLYB_P CORRECTED U VALUE	0.000 0.000
NO.	0.000 0.000
I SIL P	0.000 0.000
T MAN P	6.000 6.
85	7,000 0,
T	000000000000000000000000000000000000000
H 24 00	000000000000000000000000000000000000000
re pt su	000000000000000000000000000000000000000
7,710_S	
N N N N N N N N N N N N N N N N N N N	
U LINE N 175M	00447 00448 00552 00554 00554 00554 00555 00565 00667 00667 00677 00775 00777

SENT 9/15/68	WRCT,08F	JNIT 1
NUMARC DATA	DATABASE	1 597

	CORRECTED L VALUE	900000000000000000000000000000000000000
	T MLYB_P CORRECTED L L VALUE	0.000
	0 T	0.000 0.000
1111	T SIL P	0.000 0.000
10S U	T MAN P	0.000 0.000
	3	0.000 0.000
	HARE	000000000000000000000000000000000000000
	⊢ st α	000000000000000000000000000000000000000
	- M W	000000000000000000000000000000000000000
	S GUL	000000000000000000000000000000000000000
	T T TENS 1 YLD	000000000000000000000000000000000000000
	U LINE N ITEM 1	00095 00096 00096 00097 00097 00103 00103 00105 00107 00113 00127 00128 00128 00128 00128 00128 00128 00128 00133 00134
	PLANT	

Page No. 09/12/88 REV.1

	ORRECTED L VALUE	477.48 6.00
	CAR P T MAN P T SIL P T CHM P T MLYB P CORRECTED L L VALUE	0.300 0.000
	CAM P	0.270 0.000
	SILP	0.240 0.000
1.65 0	MAN P	0.940 0.000
	T CAR P	0.3471 0.0000 0.00
	HARD	200 200 200 200 200 200 200 200 200 200
	- H &	000000000000000000000000000000000000000
	- 25 W	000000000000000000000000000000000000000
	TEN S T T'D S	000000000000000000000000000000000000000
	Z TEM S	000000000000000000000000000000000000000
	$\vdash \alpha \lessdot \alpha$	
	U LINE N ITEM 1	0142 0142 0144 0144 0144 0144 0144 0144
	PLANT	

Page No. 09/12/88 REV. I

PLANT ULINE TITEN STYLD ST T T CAR PTMAN PTSIL PTCHM PTMLYB P CORRECTED NUMARC DATA SENT 9/15/88 DATABASE NRCT.DBF LGS UNIT 1

VALUE	434.90	0.00	0.00	0.00	00.00	00.00	454.80	400.30	0.00	0.00	00.00	0.00	0.00	0,00	0.00	00.00	0.00	0.00	0.00	0.00	0.00	00.00	0.00	0.00	0.00	777	458.00	428.00	468.28	426.28	474.60	97.154	09 577	450.88	452.20	447.28	452.28	ALL THE STREET
	0.000	0.000	0.000	0.000	0.000	0.000	0.150	0.100	0.000	0.000	0.000	0.000	0.000	0,000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.220	0.170	0.200	0.250	0.250	0.260	0.245	0.350	0.230	0.230	0.330	0.210	0.000
	0.000	0.000	0.000	0.000	0.000	0.000	0.090	0.030	0.000	0.000	0.000	00000	0.000	0000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.070	0.100	0,000	0.080	0.050	0.100	0 000	0.080	0.120	0.000	0.290	0.280	2222
	0.000	00000	0.000	0.000	0.000	0.000	0.100	0.170	0.000	0.000	0.000	0.000	0.000	0,000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.160	0.140	0.110	0.120	0.130	0.120	0.110	0.150	0.200	0.090	0.160	0.120	2000
	0.000	0.000	0.000	0.000	0.000	0.000	0.920	1 010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0,000	0.000	0.000	0,000	0.000	0.000	0.000	0.760	0.870	0.790	0.970	0.870	0.890	0.650	0.870	0.950	0.820	0.810	0.850	2000
	0.290	0.000	0.000	0.000	0.000	0.000	0.270	002.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	000.0	0.000	0.000	0.000	0.000	0.000	0.000	0.320	0.330	0.310	0.350	0070	0.380	0.370	0.320	0.330	0.380	0.350	0.350	A PARTY A
HARD	800	0	00	0	0	0	180	164	90	0	0	0	0 0	5 0	0	0	0	0.0	9 6	00	0	0	Ç (0 0	480	174	184	160	192	182	198	166	174	178	179	173	177	
24 06	000	0	0 0	2 0	0	0	0 0	0 0	0	0	0	0	0.0	2 0	0	0	0	0 0	0.0	0.0	0	0	0 1	0 (9 0	0	0	0	0 (0.0	0 0	0 0	0	0	0	0	0 0	į.
st m	000	0	0 0	0	0	0	0 0	Þ	0	0	0	0 0	0 0	0.0	0	0	0	0 0	0.0	0	0	0	0 1	0 0	0 0	0	0	0	0 0	0.0	0.0	0 0	0	0	0	0	0.0	k
	000	0	00	0	0	0	0 0	0 0	0	0	0	0 0	0 0	9 0	0	0	0	00	0.0	0	0	0	0	00	9 0	0	0	0	0 0	0.0	0.0	0 0	0	0	0	0	0 0	
	000	0	0.0	0	0	0	0 0	9 6	0	0	0	0 0	0 0	0.0	0	0	0	0 0	0 0	0	0	0	0	0 4	9.0	0	0	0	0 0	0 0	00	0 0	0	0	0	0	0 0	
× × ×																																						
N 116M	0185 0186 0187	0188	0100	0191	0192	0193	0194	0104	0197	0198	0100	0500	0200	0203	0204	0202	0200	0207	20200	9210	0211	0212	0213	9170	0216	0217	0218	0219	0220	1220	2220	0226	0225	0220	0227	0228	0230	-
The second second																																						

Page No. 09/12/88 REV. I

VALUE

TTTENSTYLDS TTTTCARPTMAN PTSILPTCHM PTMLYB P CORRECTED
R X X HARD
A E R NUMARC DATA SENT 9/15/88 DATABASE NRCT. DBF LGS UNIT 1 PLANT U LINE N ITEM

413.60	462.56	437.56	445.56	461.56	0.00	00.00	0.00	0.00	0.00	0.00	414.70	0.00	370.20	373.50	384.60	394.20	367.20	405.80	00.00	0.00	00.00	00.0
006	180	100	170	190	0000'9	000	000	000	000	000	100	000	110	170	140	180	200	080	000	000	000	UUU
0.000	0.250	0.030	0.030	0.030	00000	0.000	0.000	0.000	0.000	0.000	0.160	00000	0.080	0.060	0.080	0.110	0.090	0.080	0.000	0.000	00000	0.000
0.000	0.110	0.000	0.090	0.100	0.000	0.000		0.000														
					0.000																	
					00000																	
149	188	168	174	187	0	0	0	0	0	0	150	0	120	122	129	136	118	177	0	0	0	g
0	0	0	0	0	0	0	0	0	o	0	0	ø	0	0	0	0	0	0	0	0	0	q
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	O	0	0	0	0	Ø
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	a
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0231	0232	0233	0234	0235	0236	0237	0238	0239	0570	0241	0242	0243	0264	0245	9770	0247	0248	0570	0250	0251	0252	0253