



October 22, 1992

L-92-300
10 CFR 50 Appendix E

U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555

Re: St. Lucie Units 1 and 2
Docket Nos. 50-335 and 50-389
Emergency Response Data System

Florida Power and Light submits the attached Data Point Library revisions (attachments 1 and 2) for St. Lucie Plant. These revisions were discussed with your Mr. J. Jolicoeur.

This information is provided to support installation by the NRC onto the Emergency Response Data System computer.

If you have any questions on the enclosed, please contact us.

Very truly yours,

DA Sager

D. A. Sager
Vice President
St. Lucie Plant

DAS:kw

DAS/PSL #802-92
Attachments

cc: Stewart D. Ebnetter, Regional Administrator, Region II, USNRC
Senior Resident Inspector, USNRC, St. Lucie Plant

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an FPL Group company

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ATTACHMENT I

Date: 09/30/92
Reactor Unit: SL1
Data Feeder: N/A
NRC ERDS Parameter: REAC VES LEV
Point ID: QA0004-1
Plant Spec Point Desc.: REACTOR VESSEL LEVEL
Generic/Cond Desc.: Reactor Vessel Water Level
Analog/Digital: A
Engr Units/Dig States: . . %
Engr Units Conversion: . . *
Minimum Instr Range: . . . 0.00
Maximum Instr Range: . . . 100.00
Zero Point Reference: . . . TAF
Reference Point Notes: . . N/A
PROC or SENS: P
Number of Sensors: 8
How Processed: SIGNAL AUCTIONEERING MINIMUM
Sensor Locations: REACTOR INTERNALS
Alarm/Trip Set Points: . . VARIABLE
NI Detector Power Supply
Cut-off Power Level: . . . N/A
NI Detector Power Supply
Turn-on Power Level: . . . N/A
Instrument Failure Mode: N/A
Temperature Compensation
For DP Transmitters: . . .
Level Reference Leg: . . . N/A
Unique System Desc.: . . . This parameter is derived from Reactor
Vessel Levels RLEV-A-1 and RLEV-B-1
which are transferred by the Qualified
Safety Parameter System (QSPDS) to
ERDADS. Each level (channel) is derived
from the heated and unheated junction
thermocouples at the eight sensor levels
in the reactor above the core. These
sensors are positioned between the head
and upper fuel alignment plate in the
reactor internals. The ERDADS processes
these signals (RLEV-A-1 & RLEV-B-1) with
an auctioneering minimum algorithm. This
function finds the lowest usable data
value in a specified group. Each data
value of the group and its quality is
examined and the following rules are
applied.

For two or more usable data values, the
result is the lowest usable data value
and the quality is the lowest quality of
the usable data.

For only one usable data value, the
result is set to that value and the
quality is poor.

For no usable data, the value of the
result is set to the lowest of all the
(bad) data and the quality is bad.

* The location of each sensor and the
respective monitored level is attached.

attachment for page # of 47
unit one REACTOR VESSEL LEVEL
(8A0004-1).

TABLE 5-2

REACTOR VESSEL LEVEL SPECIFICATIONS

(Unit 1)

<u>Sensor</u>	<u>Location*</u>	<u>Level Segment (%)</u>	<u>Value If Uncovered (%)</u>
None			100
1	186 1/8	20	80
2	164 3/8	19	61
3	108	18	43
4	71 5/8	14	29
5	50 5/8	10	19
6	29 5/8	7	12
7	19 5/8	5	7
8	10 5/8	7	0

* Inches to fuel alignment plate.

Date:..... 09/30/92
 Reactor Unit:..... SL1
 Data Feeder:..... N/A
 NRC ERDS Parameter:..... SUB MARGIN
 Point ID:..... QA0005-1
 Plant Spec Point Desc:.. RCS LOW TEMP SUBCOOLING MARGIN
 Generic/Cond Desc:..... Saturation Temp.-Highest CET
 Analog/Digital:..... A
 Engr Units/Dig States:.. DEG F
 Engr Units Conversion:.. N/A
 Minimum Instr Range:.... 700 SUBCOL
 Maximum Instr Range:.... -2100 SPHT
 Zero Point Reference:.... N/A
 Reference Point Notes:.. N/A
 PROC or SENS:..... P
 Number of Sensors:..... 8
 How Processed:..... SIGNAL AUCTIONEERING MINIMUM
 Sensor Locations:..... REACTOR INTERNALS
 Alarm/Trip Set Points:.. VARIABLE
 NI Detector Power Supply
 Cut-off Power Level:.... N/A
 NI Detector Power Supply
 Turn-on Power Level:.... N/A
 Instrument Failure Mode: N/A
 Temperature Compensation
 For DP Transmitters:....
 Level Reference Leg:.... N/A
 Unique System Desc:..... This parameter is derived from eight
 Subcooled values TMARHEAD-A-1,
 TMARRCS-B-1, TMARUR-A-1, TMARHEAD-B-1,
 TMARCET-A-1, TMARUR-B-1, TMARRCS-A-1,
 and TMARCET-B-1 which are provided by
 the Qualified Safety Parameter Display
 System (QSPDS). They are processed by a
 signal auctioneering minimum algorithm.
 This function finds the lowest usable
 data value in a specified group. Each
 data value of the group and its quality
 is examined and the following rules are
 applied.

For two or more usable data values, the result is the lowest usable data value and the quality is the lowest quality of the usable data.

For only one usable data value, the result is set to that value and the quality is poor.

For no usable data, the value of the result is set to the lowest of all the (bad) data and the quality is bad.

SPHT = Superheat

Date:..... 10/06/92
Reactor Unit:..... SL1
Data Feeder:..... N/A
NRC ERDS Parameter:..... SG LEVEL 1/A
Point ID:..... LT9012-1
Plant Spec Point Desc.: STEAM GENERATOR 1A LEVEL (WR)
Generic/Cond Desc.:..... Steam Generator A Water Level
Analog/Digital:..... A
Engr Units/Dig States:.. %
Engr Units Conversion:.. 4.6464 inches per percent
Minimum Instr Range:.... 0.00
Maximum Instr Range:.... 100.00
Zero Point Reference:.... LTCL
Reference Point Notes:.. N/A
PROC or SENS:..... S
Number of Sensors:..... 1
How Processed:..... N/A
Sensor Locations:..... CONTAINMENT BUILDING 27 FT. LVL.
Alarm/Trip Set Points:.. VARIABLE
NI Detector Power Supply
Cut-off Power Level:.... N/A
NI Detector Power Supply
Turn-on Power Level:.... N/A
Instrument Failure Mode: N/A
Temperature Compensation
For DP Transmitters.....
Level Reference Leg:.... N/A
Unique System Desc.:..... This parameter is the "A" steam
generator wide range level instrument.
It is converted to engineering units
using a linear equation.

Top of the U-tubes is 338.56 inches from
the LTCL.

LTCL = Lower Tap Center Line. The lower
tap is 19.5 inches above the bottom of
the U-tubes.

Date:..... 10/06/92
Reactor Unit:..... SL1
Data Feeder:..... N/A
NRC ERDS Parameter:..... SG LEVEL 2/B
Point ID:..... LT9022-1
Plant Spec Point Desc:.. STEAM GENERATOR 1B LEVEL (NR)
Generic/Cond Desc:..... Steam Generator B Water Level
Analog/Digital:..... A
Engr Units/Dig States:.. %
Engr Units Conversion:.. 4.6464 inches per percent
Minimum Instr Range:.... 0.00
Maximum Instr Range:.... 100.00
Zero Point Reference:.... LTCL
Reference Point Notes:.. N/A
PROC or SENS:..... S
Number of Sensors: 1
How Processed:..... N/A
Sensor Locations:..... CONTAINMENT BUILDING 27 FT. LVL
Alarm/Trip Set Points:.. VARIABLE
NI Detector Power Supply
Cut-off Power Level:.... N/A
NI Detector Power Supply
Turn-on Power Level:.... N/A
Instrument Failure Mode: N/A
Temperature Compensation
For DP Transmitters:....
Level Reference Leg:.... N/A
Unique System Desc:..... This parameter is the "B" steam
generator wide range level instrument.
It is converted to engineering units
using a linear equation.

Top of the U-tubes is 338.56 inches from
the LTCL.

LTCL = Lower Tap Center Line. The lower
tap is 19.5 inches above the bottom of
the U-tubes.

Date:..... 09/23/92
Reactor Unit:..... SL1
Data Feeder:..... N/A
NRC ERDS Parameter:..... PRZR LEVEL
Point ID:..... QA0001-1
Plant Spec Point Desc.: PRESSURIZER LEVEL
Generic/Cond Desc.:..... Primary System Pressurizer Level
Analog/Digital:..... A
Engr Units/Dig States:.. %
Engr Units Conversion:.. 3.6 inches per percent
Minimum Instr Range:.... 0.00
Maximum Instr Range:.... 100
Zero Point Reference:.... LTCL
Reference Point Notes:.. N/A
PROC or SENS:..... P
Number of Sensors:..... 2
How Processed:..... AVERAGE WITH EXPANDED QUALITY
Sensor Locations:..... CONTAINMENT BUILDING 27 FT. LVL.
Alarm/Trip Set Points:.. VARIABLE
NI Detector Power Supply
Cut-off Power Level:.... N/A
NI Detector Power Supply
Turn-on Power Level:.... N/A
Instrument Failure Mode: N/A
Temperature Compensation
For DP Transmitters:....
Level Reference Leg:.... WET
Unique System Desc.:.... This parameter is pressurizer level. It is derived from Pressurizer Level Control signals LT1110X-1 and LT1110Y-1 which are linear. These signals are processed by an average with expanded quality algorithm. This function obtains the average of all values with a good status. It also sets the quality of the result based on the number of values with good status, versus the total number of inputs. The possible status values are:
Greater than 50% of all inputs have good status, result is good;
Only one good value and the total inputs are 3 or more, the result is poor;
When there are no good data values but there are some with poor or suspect, the result is poor;
The result is suspect for all other cases except all bad, in this case the result is bad.

The top of the heaters is 73.98 inches above the lower tap center line.

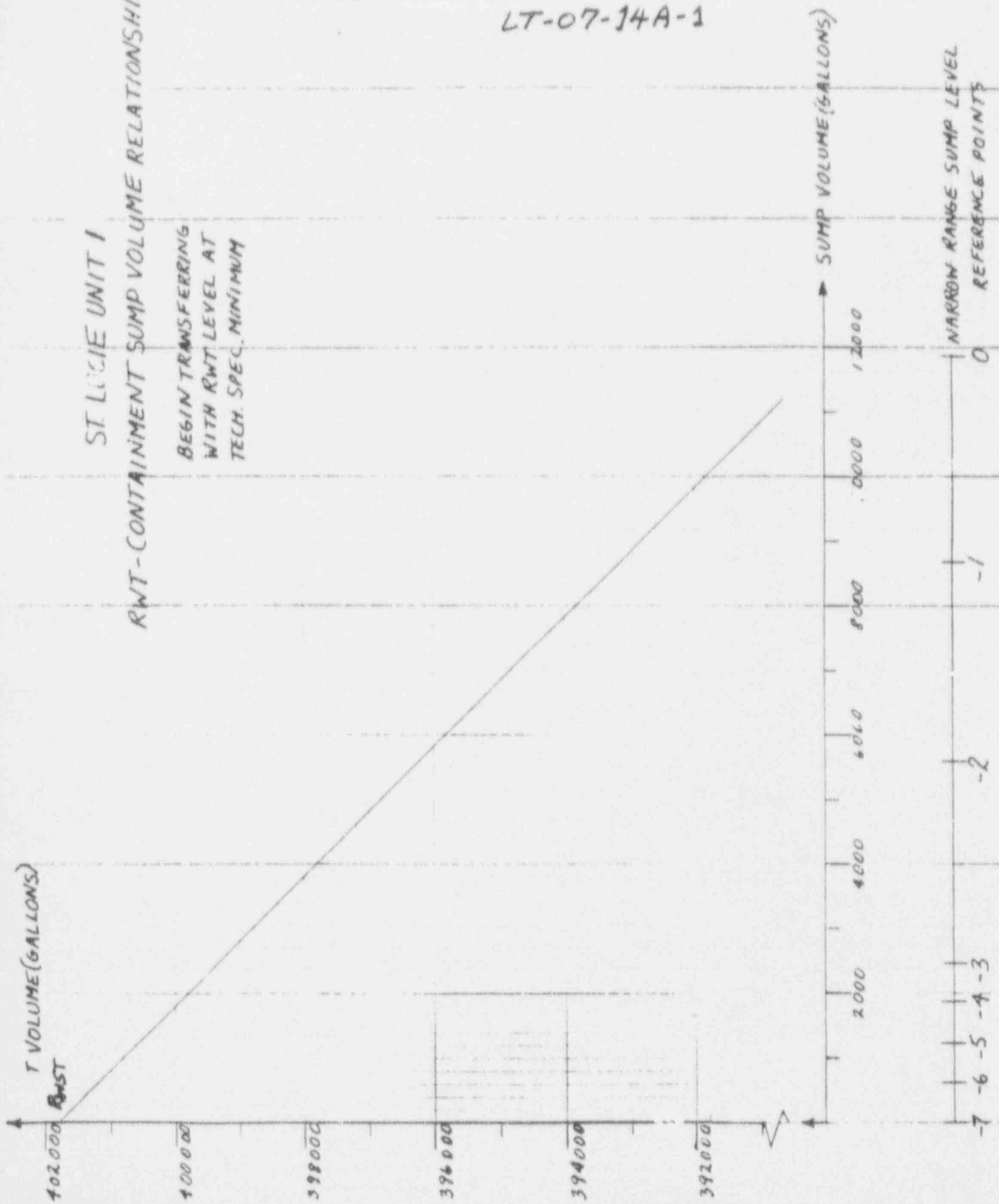
LTCL = Lower Tap Center Line

Date:..... 09/25/92
Reactor Unit:..... SL1
Data Feeder:..... N/A
NRC ERDS Parameter:..... CTMNT SMP NR
Point ID:..... LT07-14A-1
Plant Spec Point Desc.: CONTAINMENT SUMP LEVEL (NR)
Generic/Cond Desc.:..... CTMNT Sump Narrow Range Level
Analog/Digital:..... A
Engr Units/Dig States:.. FEET
Engr Units Conversion:.. *
Minimum Instr Range:.... -7.00
Maximum Instr Range:.... 0.00
Zero Point Reference:.... PLTFRM
Reference Point Notes:.. N/A
PROC or SENS:..... S
Number of Sensors:..... 1
How Processed:..... N/A
Sensor Locations:..... ZERO FT. LVL. RCB./REACTOR CAVITY SUMP
Alarm/Trip Set Points:.. VARIABLE
NI Detector Power Supply
Cut-off Power Level:.... N/A
NI Detector Power Supply
Turn-on Power Level:.... N/A
Instrument Failure Mode: N/A
Temperature Compensation
For DP Transmitters:....
Level Reference Leg:.... N/A
Unique System Desc.:.... This parameter is the containment sump
narrow range instrument. It is converted
to engineering units using a linear
equation.

PLTFRM = Sump Pump Platform = 0' 0"

* See Attached Curves.

ATTACHMENT FOR PAGE 28 OF 47
 CONTAINMENT SUMP LEVEL
 LT-07-14A-1



PROJECT: LT-07-14A-1
 DATE: 10/1/08
 BY: J. J. J.

Date:..... 09/25/92
 Reactor Unit:..... SL1
 Data Feeder:..... N/A
 NRC ERDS Parameter:..... CTMNT SMP WR
 Point ID:..... QA0008-1
 Plant Spec Point Desc.: HIGH CONTAINMENT LEVEL
 Generic/Cond Desc.:..... CTMNT Sump Wide Range Level
 Analog/Digital:..... A
 Engr Units/Dig States:.. FEET
 Engr Units Conversion:.. *
 Minimum Instr Range:.... -1.0
 Maximum Instr Range:.... 26.0
 Zero Point Reference:.... PLTFRM
 Reference Point Notes:.. N/A
 PROC or SENS:..... P
 Number of Sensors:..... 2
 How Processed:..... SIGNAL AUCTIONEERING MAXIMUM
 Sensor Locations:..... -1 TO 26 FT.LVL RCB. REACTOR CAVITY SUMP
 Alarm/Trip Set Points:.. VARIABLE
 NI Detector Power Supply
 Cut-off Power Level:.... N/A
 NI Detector Power Supply
 Turn-on Power Level:.... N/A
 Instrument Failure Mode: N/A
 Temperature Compensation
 For DP Transmitters:....
 Level Reference Leg:.... N/A
 Unique System Desc.:.... This parameter is a containment sump

wide range instrument. It is derived from Containment Sump Level signals LT07-13A-1 and LT07-13B-1 which are linear. They are processed by a signal auctioneering maximum algorithm. This function finds the highest usable data value in a specified group. Each data value of the group and its quality is examined and the following rules are used.

For two or more usable data values, the result is the highest usable data value and the quality is the lowest quality of the usable data.

For only one usable data value, the result is set to that value and the quality is poor.

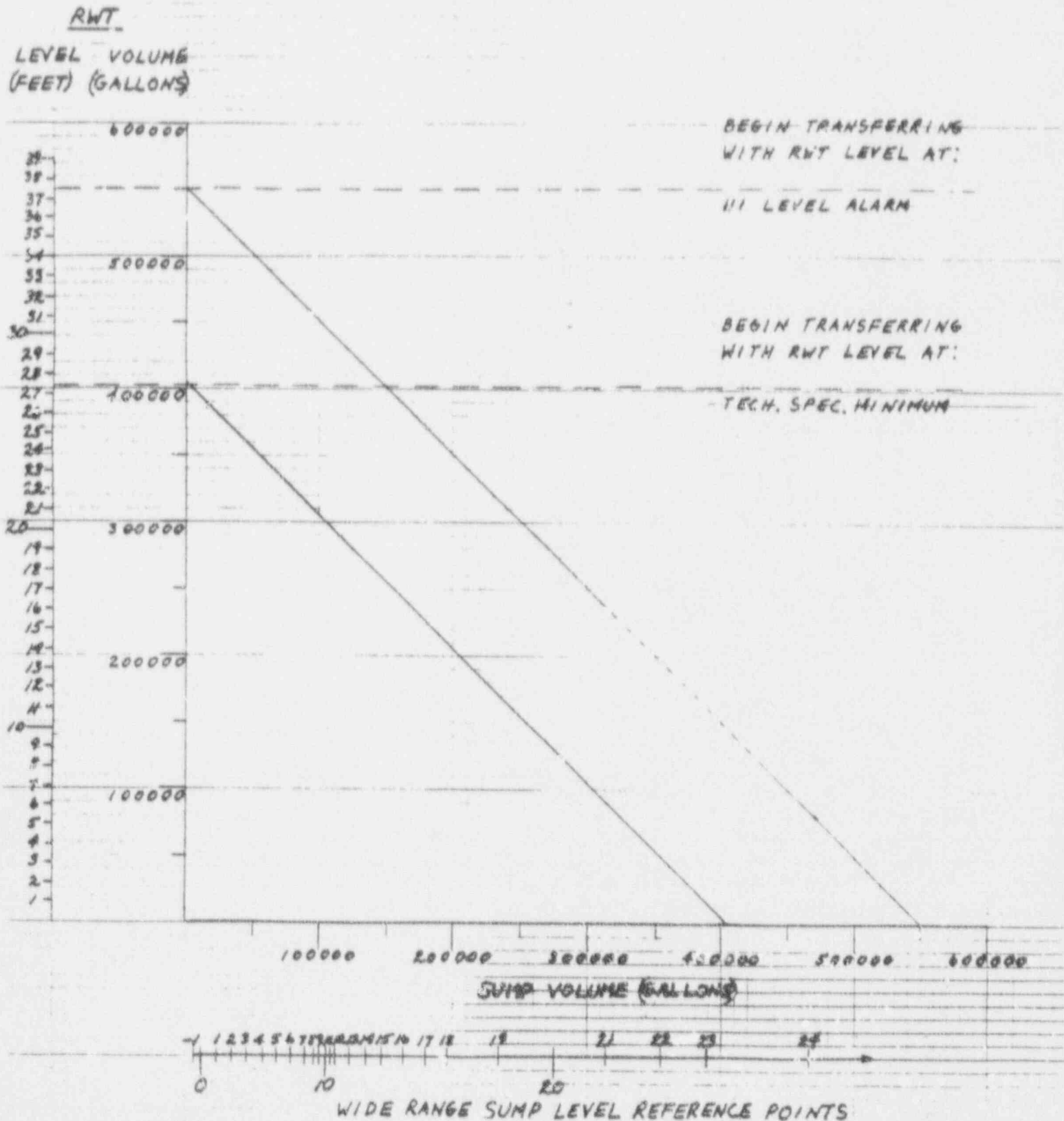
For no usable data, the value of the result is set to the highest of all the (bad) data and the quality is bad.

PLTFRM = Sump Pump Platform = 0'_0"

* See Attached Curves.

ST. LUCIE UNIT 1
RWT-CONTAINMENT SUMP VOLUME RELATIONSHIP

ATTACHMENT FOR PAGE 29 OF 47
CONTAINMENT SUMP LEVEL
QA0008-1



Date:..... 08/13/92
Reactor Unit:..... SL1
Data Feeder:..... N/A
NRC ERDS Parameter:..... EFF GAS RAD
Point ID:..... RT6648-1
Plant Spec Point Desc.: WASTE GAS DISCHARGE RADIATION
Generic/Cond Desc.:..... Radioactivity of Released Gasses
Analog/Digital:..... A
Engr Units/Dig States:.. CPM
Engr Units Conversion:.. 4.64e-06 uc/cc/cpm
Minimum Instr Range:.... 10.0
Maximum Instr Range:.... 1.0E+07
Zero Point Reference:.... N/A
Reference Point Notes:.. N/A
PROC or SENS:..... S
Number of Sensors:..... 1
How Processed:..... N/A
Sensor Locations:..... AUXILIARY BUILDING ZERO FT LVL.
Alarm/Trip Set Points:.. VARIABLE
NI Detector Power Supply
Cut-off Power Level:.... N/A
NI Detector Power Supply
Turn-on Power Level:.... N/A
Instrument Failure Mode: N/A
Temperature Compensation
For DP Transmitters:....
Level Reference Leg:.... N/A
Unique System Desc.:.... This parameter is the gas waste
discharge radiation instrument. It is
converted to engineering units using a
logarithmic equation.

Date:..... 08/13/92
Reactor Unit:..... SL1
Data Feeder:..... N/A
NRC ERDS Parameter:..... EFF LIQ RAD
Point ID:..... RT6627-1
Plant Spec Point Desc.: LIQUID WASTE DISCHARGE RAD
Generic/Cond Desc.:..... Radioactivity of Released Liquid
Analog/Digital:..... A
Engr Units/Dig States:... CPM
Engr Units Conversion:... 7.254e-09 uc/ml/cpm
Minimum Instr Range:.... 10
Maximum Instr Range:.... 1.0E+06
Zero Point Reference:... N/A
Reference Point Notes:... N/A
PROC or SENS:.. S
Number of Sensors:..... 1
How Processed:..... N/A
Sensor Locations:..... AUXILIARY BUILDING ZERO FT. LVL CCW AREA
Alarm/Trip Set Points:... VARIABLE
NI Detector Power Supply
Cut-off Power Level:.... N/A
NI Detector Power Supply
Turn-on Power Level:.... N/A
Instrument Failure Mode: N/A
Temperature Compensation
For DP Transmitters:....
Level Reference Leg:.... N/A
Unique System Desc.:.... This parameter is the liquid waste
discharge radiation instrument. It is
converted to engineering units using a
logarithmic equation.

Date:..... 08/13/92
Reactor Unit:..... SL1
Data Feeder:..... N/A
NRC ERDS Parameter:..... CCND A/E RAD
Point ID:..... RE26-35-1
Plant Spec Point Desc.: CONDENSER AIR EJECTOR RAD
Generic/Cond Desc.:..... Condenser Air Ejector Radioactiv
Analog/Digital:..... A
Engr Units/Dig Stat:..... CPM
Engr Units Conversion:.. 4.29e-08 uc/cc/cpm
Minimum Instr Range:.... 1.0E+01
Maximum Instr Range:.... 1.0E+06
Zero Point Reference:.... N/A
Reference Point Notes:.. N/A
PROC or SENS:..... S
Number of Sensors:..... 1
How Processed:..... N/A
Sensor Locations:..... TURBINE BUILDING 19 FT. LVL.
Alarm/Trip Set Points:.. VARIABLE
NI Detector Power Supply
Cut-off Power Level:.... N/A
NI Detector Power Supply
Turn-on Power Level:.... N/A
Instrument Failure Mode. N/A
Temperature Compensation
For DP Transmitters:....
Level Reference Leg: ... N/A
Unique System Desc.:.... This parameter measures radiation levels
in the condenser air ejector discharge.
It is converted to engineering units
using a logarithmic equation.

Date:..... 09/25/92
Reactor Unit:..... SL1
Data Feeder:..... N/A
NRC ERDS Parameter:..... 3G BD RAD 1A
Point ID:..... RT23910-1
Plant Spec Point Desc.: BLOWDOWN RAD - STM GEN 1A
Generic/Cond Desc.:..... Stm Gen A Blowdown Rad Level
Analog/Digital:..... A
Engr Units/Dig States:.. CPM
Engr Units Conversion:.. 5.0E-07 uci/cc/cpm
Minimum Instr Range:.... 1.0E+01
Maximum Instr Range:.... 1.0E+06
Zero Point Reference:.... N/A
Reference Point Notes:.. N/A
PROC or SENS:..... S
Number of Sensors:..... 1
How Processed:..... N/A
Sensor Locations:..... 43 FT. LVL BY CLOSED BLOWDOWN HEAT EXCH.
Alarm/Trip Set Points:.. VARIABLE
NI Detector Power Supply
Cut-off Power Level:.... N/A
NI Detector Power Supply
Turn-on Power Level:.... N/A
Instrument Failure Mode: N/A
Temperature Compensation
For DP Transmitters:....
Level Reference Lag:.... N/A
Unique System Desc.:.... This parameter measures radiation levels
on steam generator "A" blowdown.

Date:..... 09/25/92
Reactor Unit: SL1
Data Feeder:..... N/A
TRC ERDS Parameter:..... SG BD RAD 2B
Point ID:..... RT23920-1
Plant Spec Point Desc.: BLOWDOWN RAD - STM GEN 1B
Generic/Cond Desc.:..... Stm Gen B Blowdown Rad Level
Analog/Digital:..... A
Engr Units/Dig States:.. CPM
Engr Units Conversion:.. 5.0E-07 uci/cc/cpm
Minimum Instr Range:.... 1.0E+01
Maximum Instr Range:.... 1.0E+06
Zero Point Reference:.... N/A
Reference Point Notes:.. N/A
PROC or SENS:..... S
Number of Sensors:..... 1
How Processed:..... N/A
Sensor Locations:..... 43 FT LVL. BY CLOSED BLOWDOWN HEAT EXCH.
Alarm/Trip Set Points:.. VARIABLE
NI Detector Power Supply
Cut-off Power Level:.... N/A
NI Detector Power Supply
Turn-on Power Level:.... N/A
Instrument Failure Mode: N/A
Temperature Compensation
For DP Transmitters:....
Level Reference Leg:.... N/A
Unique System Desc.:.... This parameter measures radiation levels
on steam generator "B" blowdown.

Date:..... 09/29/92
Reactor Unit:..... SL1
Data Feeder:..... N/A
NRC ERDS Parameter:..... BWST LEVEL
Point ID:..... RWTAL-1
Plant Spec Point Desc.: REFUELING WATER TANK AVG LEVEL
Generic/Cond Desc.:..... Borated Water Storage Tank Level
Analog/Digital:..... A
Engr Units/Dig States:.. FEET
Engr Units Conversion:.. 14,690 gal per foot
Minimum Instr Range:.... 0.00
Maximum Instr Range:.... 50.0
Zero Point Reference:.... *
Reference Point Notes:.. N/A
PROC or SENS:..... P
Number of Sensors:..... 4
How Processed:..... AVERAGE WITH EXPANDED QUALITY
Sensor Locations:..... REFUELING WATER TANK 19 FT. LVL.
Alarm/Trip Set Points:.. VARIABLE
NI Detector Power Supply
Cut-off Power Level:.... N/A
NI Detector Power Supply
Turn-on Power Level:.... N/A
Instrument Failure Mode: N/A
Temperature Compensation
For DP Transmitters:....
Level Reference Leg:.... N/A
Unique System Desc.:.... This parameter measures refueling water tank level. It is derived from Refueling Water Tank Level signals LT07-2A-1, LT07-2B-1, LT07-2C-1 and LT07-2D-1 which are linear. These signals are processed by an average with expanded quality algorithm. This function obtains the average of all values with a good status. It also sets the quality of the result based on the number of values with good status, versus the total number of inputs. The possible status values are:
Greater than 50% of all inputs have good status, result is good,
Only one good value and the total inputs are 3 or more, the result is poor;
When there are no good data values but there are some with poor or suspect, the result is poor;
The result is suspect for all other cases except all bad, in this case the result is bad.

* Zero point reference is 12.0" from tank bottom. Tank bottom refers to zero gallons.

ATTACHMENT II

Date:..... 09/30/92
Reactor Unit:..... SL2
Data Feeder:..... N/A
NRC ERDS Parameter:..... REAC VES LEV
Point ID:..... RLEV-H-2
Plant Spec Point Desc.: REACTOR VESSEL LEVEL - HEAD
Generic/Cond Desc.:..... Reactor Vessel Water Level-head
Analog/Digital:..... A
Engr Units/Dig States:.. %
Engr Units Conversion:.. *
Minimum Instr Range:.... 0.00
Maximum Instr Range:.... 100.00
Zero Point Reference:.... TAF
Reference Point Notes:.. N/A
PROC or SENS:..... P
Number of Sensors:..... 3
How Processed:..... SIGNAL AUCTIONEERING MINIMUM
Sensor Locations:..... REACTOR INTERNALS
Alarm/Trip Set Points:.. VARIABLE
NI Detector Power Supply
Cut-off Power Level:.... N/A
NI Detector Power Supply
Turn-on Power Level:.... N/A
Instrument Failure Mode: N/A
Temperature Compensation
For DP Transmitters:....
Level Reference Leg:.... N/A
Unique System Desc.:.... This parameter is derived from Reactor
Vessel Levels RLEV-HA-2 AND RLEV-HB-2
which are provided by the Qualified
Safety Parameter System (QSPDS) to
ERDADS. Each level (channel) is derived
from the heated and unheated junction
thermocouples at the three sensors
levels in the reactor. These sensors are
located in the vessel head above the
upper guide structure support plate. The
ERDADS processes these signals
(RLEV-HA-2 & RLEV-HB-2) with
auctioneering minimum algorithm. This
function finds the lowest usable data
value in a specified group. Each data
value of the group and its quality is
examined and the following rules are
applied.
For two or more usable data values, the
result is the lowest usable data value
and the quality is the lowest quality of
the usable data.
For only one usable data value, the
result is set to that value and the
quality is poor.
For no usable data, the value of the
result is set to the lowest of all the
(bad) data and the quality is bad.

* The location of each sensor and the
respective monitored level is attached.

TABLE 6-1

REACTOR VESSEL LEVEL SPECIFICATIONS (Unit 2)

<u>Sensor</u>	<u>Location*</u>	<u>Level Segment (%)</u>	<u>Value If Uncovered (%)</u>	
None			100	} Head
1	170 1/2	52	48	
2	140 3/4	28	20	
3	111 1/8	20	0	
None			100	
4	18 5/8	18	82	
5	74 5/8	21	61	
6	53 5/8	20	41	
7	32 6/8	19	22	
8	12 5/8	22	0	

* Inches to fuel alignment plate

Date:..... 09/30/92
 Reactor Unit:..... SL2
 Data Feeder:..... N/A
 NRC ERDS Parameter:..... REAC VES LEV
 Point ID:..... RLEV-P-2
 Plant Spec Point Desc.: REACTOR VESSEL LEVEL - PLENUM
 Generic/Cond Desc.:..... Reactor Vessel Water Level-plenm
 Analog/Digital:..... A
 Engr Units/Dig States:... %
 Engr Units Conversion:... *
 Minimum Instr Range:.... 0.00
 Maximum Instr Range:.... 100.00
 Zero Point Reference:... TAF
 Reference Point Notes:... N/A
 PROC or SENS:..... P
 Number of Sensors:..... 5
 How Processed:..... SIGNAL AUCTIONEERING MINIMUM
 Sensor Locations:..... REACTOR INTERNALS
 Alarm/Trip Set Points:... VARIABLE
 NI Detector Power Supply
 Cut-off Power Level:.... N/A
 NI Detector Power Supply
 Turn-on Power Level:.... N/A
 Instrument Failure Mode: N/A
 Temperature Compensation
 For DP Transmitters:....
 Level Reference Leg:.... N/A
 Unique System Desc.:.... This parameter is derived from Reactor
 Vessel Levels RLEV-PA-2 AND RLEV-PB-2
 which are provided by the Qualified
 Safety Parameter System (QSPDS) to
 ERDADS. Each level (channel) is derived
 from the heated and unheated junction
 thermocouples at the five sensors levels
 in the reactor. These sensors are
 located in the plenum between the upper
 guide structure support plate and top of
 the upper fuel alignment plate. The
 ERDADS processes these signals
 (RLEV-PA-2 & RLEV-PB-2) with an
 auctioneering minimum algorithm. This
 function finds the lowest usable data
 value in a specified group. Each data
 value of the group and its quality is
 examined and the following rules are
 applied.
 For two or more usable data values, the
 result is the lowest usable data value
 and the quality is the lowest quality of
 the usable data.
 For only one usable data value, the
 result is set to that value and the
 quality is poor.
 For no usable data, the value of the
 result is set to the lowest of all the
 (bad) data and the quality is bad.

* The location of each sensor and the
 respective monitored level is attached.

TABLE 6-1

REACTOR VESSEL LEVEL SPECIFICATIONS

(Unit 2)

<u>Sensor</u>	<u>Location*</u>	<u>Level Segment (%)</u>	<u>Value If Uncovered (%)</u>
None			100
1	170 1/2	52	48
2	140 3/4	28	20
3	111 1/8	20	0
None			100
4	98 5/8	18	82
5	74 5/8	21	61
6	53 5/8	20	41
7	32 6/8	19	22
8	12 5/8	22	0

} Plenum

* Inches to fuel alignment plate

Date:..... 09/30/92
 Reactor Unit:..... SL2
 Data Feeder:..... N/A
 NRC ERDS Parameter:..... SUB MARGIN
 Point ID:..... QA0005-2
 Plant Spec Point Desc.: RCS LOW TEMP SUBCOOLING MARGIN
 Generic/Cond Desc.:..... Saturation Temp.-Highest CET
 Analog/Digital:..... A
 Engr Units/Dig States:.. DEG F
 Engr Units Conversion:.. LINEAR
 Minimum Instr Range:.... 700 SUBCOL
 Maximum Instr Range:.... -2100 SPHT
 Zero Point Reference:.. N/A
 Reference Point Notes:.. N/A
 PROC or SENS:..... P
 Number of Sensors:..... 8
 How Processed:..... SIGNAL AUCTIONEERING MINIMUM
 Sensor Locations:..... REACTOR INTERNALS
 Alarm/Trip Set Points:.. VARIABLE
 NI Detector Power Supply
 Cut-off Power Level:.... N/A
 NI Detector Power Supply
 Turn-on Power Level:.... N/A
 Instrument Failure Mode: N/A
 Temperature Compensation
 For DP Transmitters:....
 Level Reference Leg:.... N/A
 Unique System Desc.:.... This parameter is derived from eight
 Subcooled values TMARHEAD-A-2,
 TMARRCS-B-2, TMARUR-A-2, TMARHEAD-B-2,
 TMARCET-A-2, TMARUR-B-2, TMARRCS-A-2,
 and TMARCET-B-2 which are provided by
 the Qualified Safety Parameter Display
 System (QSPDS). They are processed by a
 signal auctioneering minimum algorithm.
 This function finds the lowest usable
 data value in a specified group. Each
 data value of the group and its quality
 is examined and the following rules are
 applied.

For two or more usable data values, the result is the lowest usable data value and the quality is the lowest quality of the usable data.

For only one usable data value, the result is set to that value and the quality is poor.

For no usable data, the value of the result is set to the lowest of all the (bad) data and the quality is bad.

SPHT= Superheat

Date:..... 10/06/92
Reactor Unit:..... SL2
Data Feeder:..... N/A
NRC ERDS Parameter:..... SG LEVEL 1/A
Point ID:..... LT9012-2
Plant Spec Point Desc.: STEAM GENERATOR 2A LEVEL (WR)
Generic/Cond Desc.:..... Steam Generator A Water Level
Analog/Digital:..... A
Engr Units/Dig States:.. %
Engr Units Conversion:.. 4.6464 inches per percent
Minimum Instr Range:.... 0.00
Maximum Instr Range:.... 100.00
Zero Point Reference:.... LTCL
Reference Point Notes:.. N/A
PROC or SENS:..... S
Number of Sensors:..... 1
How Processed:..... N/A
Sensor Locations:..... CONTAINMENT BUILDING 27 FT. LVL.
Alarm/Trip Set Points:.. VARIABLE
NI Detector Power Supply
Cut-off Power Level:.... N/A
NI Detector Power Supply
Turn-on Power Level:.... N/A
Instrument Failure Mode: N/A
Temperature Compensation
For DP Transmitters:....
Level Reference Leg:.... WET
Unique System Desc.:.... This parameter is the "A" steam
generator wide range level instrument.
It is converted to engineering units
using a linear equation.

Top of the U-tubes is 338.56 inches from
the LTCL.

LTCL = Lower Tap Center Line. The lower
tap is 19.5 inches above the bottom of
the U-tubes.

Date:..... 10/06/92
Reactor Unit:..... SL2
Data Feeder:..... N/A
NRC ERDS Parameter:..... SG LEVEL 2/B
Point ID:..... LT9022-2
Plant Spec Point Desc.: STEAM GENERATOR 2B LEVEL (WR)
Generic/Cond Desc.:..... Steam Generator B Water Level
Analog/Digital:..... A
Engr Units/Dig States:.. %
Engr Units Conversion:.. 4.6464 inches per percent
Minimum Instr Range:.... 0.00
Maximum Instr Range:.... 100.00
Zero Point Reference:.... LTCL
Reference Point Notes:.. N/A
PROC or SENS:..... S
Number of Sensors:..... 1
How Processed:..... N/A
Sensor Locations:..... CONTAINMENT BUILDING 27 FT. LVL.
Alarm/Trip Set Points:.. VARIABLE
NI Detector Power Supply
Cut-off Power Level:.... N/A
NI Detector Power Supply
Turn-on Power Level:.... N/A
Instrument Failure Mode: N/A
Temperature Compensation
For DP Transmitters:....
Level Reference Leg:.... N/A
Unique System Desc.:.... This parameter is the "B" steam
generator wide range level instrument.
It is converted to engineering units
using a linear equation.

Top of the U-tubes is 338.56 inches from
the LTCL.

LTCL = Lower Tap Center Line. The lower
tap is 19.5 inches above the bottom of
the U-tubes.

Date:..... 09/23/92
Reactor Unit:..... SL2
Data Feeder:..... N/A
NRC ERDS Parameter:..... PRZR LEVEL
Point ID:..... QA0001-2
Plant Spec Point Desc.: PRESSURIZER LEVEL
Generic/Cond Desc.:..... Primary System Pressurizer Level
Analog/Digital:..... A
Engr Units/Dig States:... %
Engr Units Conversion:... 3.6 inches per percent
Minimum Instr Range:.... 0.00
Maximum Instr Range:.... 100.0
Zero Point Reference:.... LTCL
Reference Point Notes:... N/A
PROC or SENS:..... P
Number of Sensors:..... 2
How Processed:..... AVERAGE WITH EXPANDED QUALITY
Sensor Locations:..... CONTAINMENT BUILDING 27 FT. LVL.
Alarm/Trip Set Points:... VARIABLE
NI Detector Power Supply
Cut-off Power Level:.... N/A
NI Detector Power Supply
Turn-on Power Level:.... N/A
Instrument Failure Mode: N/A
Temperature Compensation
For DP Transmitters:....
Level Reference Leg:.... N/A
Unique System Desc.:.... This parameter is pressurizer level. It is derived from Pressurizer Level Control signals LT1110X-2 and LT1110Y-2 which are linear. These two signals are processed by an average with expanded quality algorithm. This function obtains the average of all values with a good status. It also sets the quality of the result based on the number of values with good status, versus the total number of inputs. The possible status values are:
Greater than 50% of all inputs have good status, result is good;
Only one good value and the total inputs are 3 or more, the result is poor;
When there are no good data values but there are some with poor or suspect, the result is poor;
The result is suspect for all other cases except all bad, in this case the result is bad
The top of the heaters is 88.5 inches above the lower tap center line.

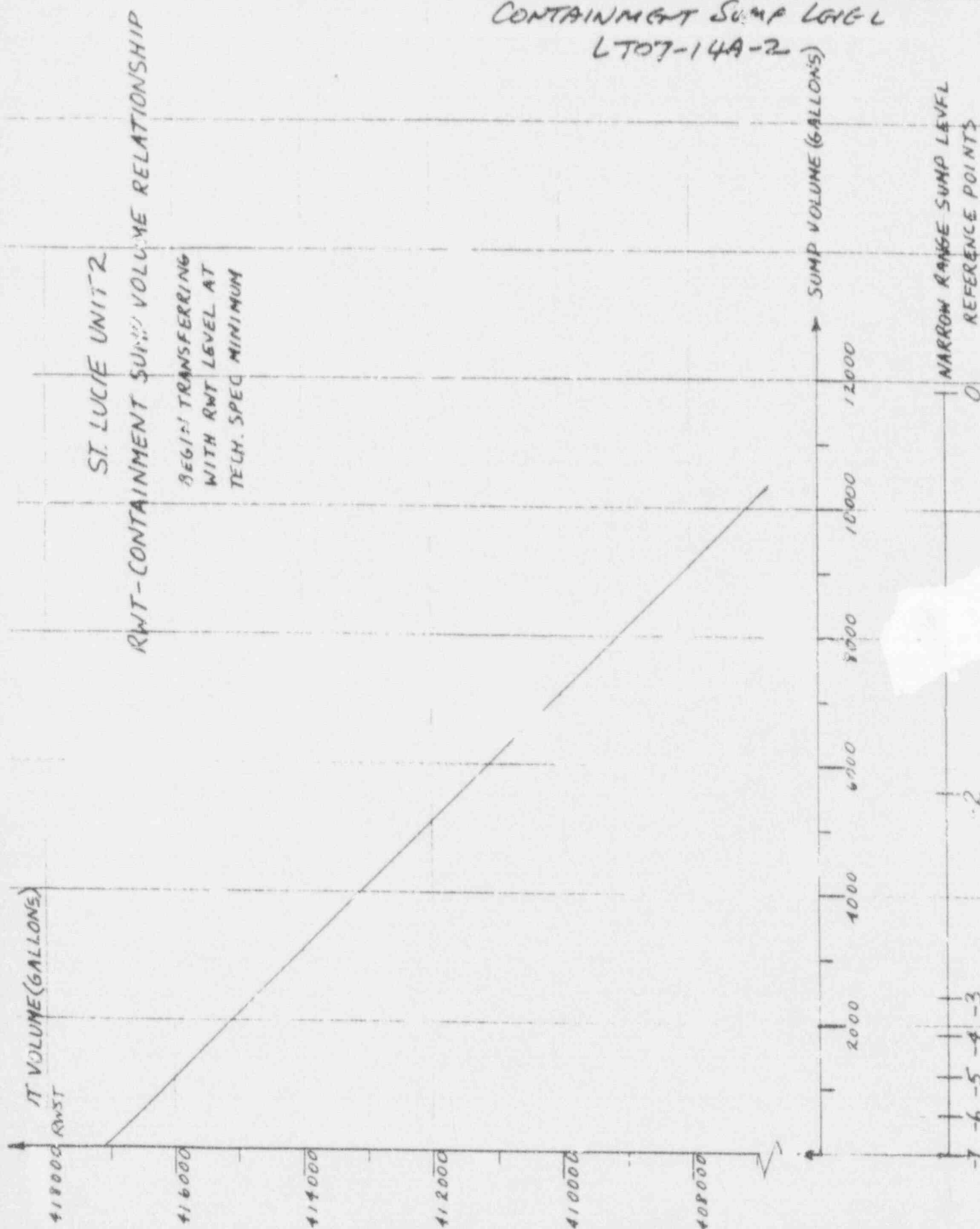
LTCL = Lower Tap Center Line

Date:..... 09/25/92
Reactor Unit:..... SL2
Data Feeder:..... N/A
NRC ERD3 Parameter:..... CTMNT SMP NR
Point ID:..... LT07-14A-2
Plant Spec Point Desc.: CONTAINMENT SUMP LEVEL (NR)
Generic/Cond Desc.:..... CTMNT Sump Narrow Range Level
Analog/Digital:..... A
Engr Units/Dig States:.. FEET
Engr Units Conversion:.. *
Minimum Instr Range:.... -7.00
Maximum Instr Range:.... 0.00
Zero Point Reference:.... PLTFRM
Reference Point Notes:.. N/A
PROC or SENS:..... S
Number of Sensors:..... 1
How Processed:..... N/A
Sensor Locations:..... 1 FT. LVL. RCB / REACTOR CAVITY SUMP
Alarm/Trip Set Points:.. VARIABLE
NI Detector Power Supply
Cut-off Power Level:.... N/A
NI Detector Power Supply
Turn-on Power Level:.... N/A
Instrument Failure Mode: N/A
Temperature Compensation
For DP Transmitters:....
Le' 1 Reference Leg:.... N/A
Unique System Desc.:.... This parameter is the containment sump
narrow range instrument. It is converted
to engineering units using a linear
equation.

PLTFRM = Sump Pump Platform = 0'_0"

* See Attached Curves.

ATTACHMENT FOR PAGE 28 OF 48
CONTAINMENT SUMP LOG-L
LT07-14A-2



Date:..... 09/25/92
 Reactor Unit:..... SL2
 Data Feeder:..... N/A
 NRC ERDS Parameter:..... CTMNT SMP WR
 Point ID:..... QA0008-2
 Plant Spec Point Desc.: HIGH CONTAINMENT LEVEL
 Generic/Cond Desc.:..... CTMNT Sump Wide Range Level
 Analog/Digital:..... A
 Engr Units/Dig States:.. FEET
 Engr Units Conversion:.. *
 Minimum Instr Range:.... -1.0
 Maximum Instr Range:.... 26.0
 Zero Point Reference:.. PLTFRM
 Reference Point Notes:.. N/A
 PROC or SLNS:..... P
 Number of Sensors:..... 2
 How Processed:..... SIGNAL AUCTIONEERING MAXIMUM
 Sensor Locations:..... -1 TO 26 FT.LVL. PCB, REACTOR CAVITY SUMP
 Alarm/Trip Set Points:.. VARIABLE
 NI Detector Power Supply
 Cut-off Power Level:.... N/A
 NI Detector Power Supply
 Turn-on Power Level:.... N/A
 Instrument Failure Mode: N/A
 Temperature Compensation
 For DP Transmitters:....
 Level Reference Leg:.... N/A
 Unique System Desc.:....

This parameter is a containment sump wide range instrument and is derived from Containment Sump Level signals LT07-13A-2 and LT07-13B-2 which are linear. They are processed by a signal auctioneering maximum algorithm. This function finds the highest usable data value in a specified group. Each data value of the group and it's quality is examined and the following rules are used.

For two or more usable data values, the result is the highest usable data value and the quality is the lowest quality of the usable data.

For only one usable data value, the result is set to that value and the quality is poor.

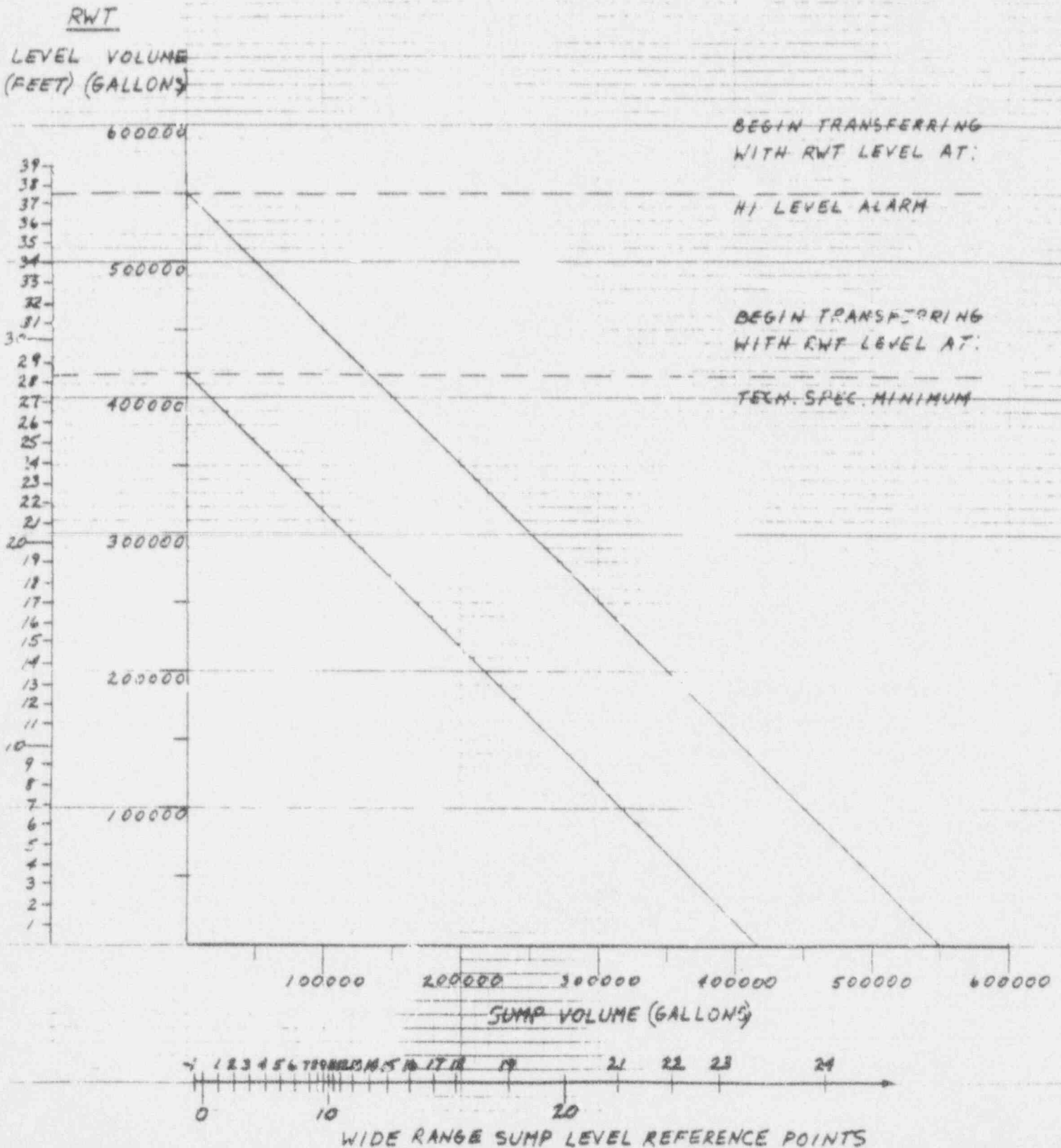
For no usable data, the value of the result is set to the highest of all the (bad) data and the quality is bad.

PLTFRM ~ Sump Pump Platform = 0'_0"

* See Attached Curves.

ST. LUCIE UNIT 2 RWT-CONTAINMENT SUMP VOLUME RELATIONSHIP

ATTACHMENT FOR PAGE 29 of 48
CONTAINMENT SUMP LEVEL
QA0008-2



Date:..... 09/24/92
Reactor Unit:..... SL2
Data Feeder:..... N/A
NRC ERDS Parameter:..... BWST LEVEL
Point ID:..... RWTAL-2
Plant Spec Point Desc:.. REFUELING WATER TANK AVG LEVEL
Generic/Cond Desc:..... Borated Water Storage Tank Level
Analog/Digital:..... A
Engr Units/Dig States:.. FEET
Engr Units Conversion:.. 14,690 gallons per foot
Minimum Instr Range:.... 0.00
Maximum Instr Range:.... 50.0
Zero Point Reference:.... TNKBOT
Reference Point Notes:.. N/A
PROC or SENS:..... P
Number of Sensors:..... 3
How Processed:..... AVERAGE WITH EXPANDED QUALITY
Sensor Locations:..... REFUELING WATER TANK 21 FT. LVL.
Alarm/Trip Set Points:.. VARIABLE
"I Detector Power Supply
Cut-off Power Level:.... N/A
NI Detector Power Supply
Turn-on Power Level:.... N/A
Instrument Failure Mode: N/A
Temperature Compensation
For DP Transmitters:.... N/A
Level Reference Leg:....
Unique System Desc:.....
This parameter measures refueling water tank level. It is derived from three inputs. They are LT07-2A-2, LT07-2B-2, and LT07-2C-2. These points are processed by a average with expanded quality algorithm. This function obtains the average of all values with a good status. It also sets the quality of the result based on the number of values with good status, versus the total number of inputs. The possible status values are:
Greater than 50% of all inputs have good status, result is good;
Only one good value and the total inputs are 3 or more, the result is poor;
When there are no good data values but there are some with poor or suspect, the result is poor;
The result is suspect for all other cases except all bad, in this case the result is bad.

Tank bottom refers to zero gallons.