REGULATORY DOCKET FILE COPY

memo

Docket No.: 50-389

SEP 22 1980

APPLICANT: Florida Power and Light Company

FACILITY: St. Lucie Plant, Unit No. 2

SUBJECT: SUMMARY OF MEETING HELD ON SEPTEMBER 18, 1980

A meeting was held with the applicant on September 18, 1980 in Bethesda, Maryland to discuss the St. Lucie Unit No. 2 schedule and the staff review of the tendered application. A list of attendees is shown in Enclosure No. 1.

The applicant presentation and discussion included (1) the project organization and status, (2) project schedule and (3) pre and post docketing proposal. Highlights of these items are shown in Enclosure No. 2.

The applicant maintained that the scheduled fuel load date of December 1982 is and will be achieved. The NRC projection is December 1983 based upon it's review of February 1980. The staff indicated that it would reassess this projection in light of all pending OL applications and would perform a commensurate update review. This matter is pivotal to the assignments of staff review priority. Regarding the acceptance review of the tendered application, the staff stated that the FSAR would be reviewed for completeness by our contractor, EG&G, Idaho, Inc. This acceptance review would be started shortly. On the matter of our technical review and evaluation, several suggestions and proposals were discussed including a design review approach similar to the methodology being used on the Palo Verde application. These proposals are outlined in Enclosure No. 2. The applicant agreed to subsequently provide a listing of significant systems that could be candidates for such a design review.

Ralph A. Birkel, Project Manager
Licensing Branch No. 1
Division of Licensing

Enclosures:
1. Attendance List
2. Agenda Summary Items

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R

OFFICE	DL:LB#1	DL:LB#1				
SURNAME	RABirkel/ls	BJYoungblood				
DATE	9/19/80	9/22/80				

Dr. Robert E. Uhrig, Vice President
Advanced Systems and Technology
Florida Power & Light Company
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Miami, Florida 33152

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Edward Luton; Esq., Chairman
Atomic Safety and Licensing Board
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Dr. David L. Hetrick
Professor of Nuclear Engineering
The University of Arizona
Tucson, Arizona 85721

Dr. Frank F. Hooper
School of Natural Resources
University of Michigan
Ann Arbor, Michigan 48104

Resident Inspector
St. Lucie Nuclear Power Station
c/o U. S. Nuclear Regulatory Commission
P. O. Box 400
Jensen Beach, Florida 33457

ENCLOSURE NO. 1

Attendance List

St. Lucie Plant, Unit No. 2

September 18, 1980

Florida Power and Light Company

T. Grozan
D. Evans
J. A. DeMastay
H. F. Reis
R. E. Uhrig
E. W. Dotson
G. J. Boissy
J. E. Vessely
W. Derrickson

NRC Staff

H. R. Denton
R. A. Birkel
S. Hanauer
R. Vollmer
D. Ross
D. Eisenhut
J. Youngblood
W. Paton
V. Noonan
D. F. Ross
R. H. Vollmer

CE Staff

J. Olsen
C. Brinkman

ENCLOSURE NO. 2

ST. LUCIE UNIT # 2
NRC REVIEW
FLORIDA POWER & LIGHT CO.

SEPT. 18, 1980

AGENDA

- PROJECT ORGANIZATION AND STATUS
- PROJECT SCHEDULE
- PRE AND POST DOCKETING PROPOSAL

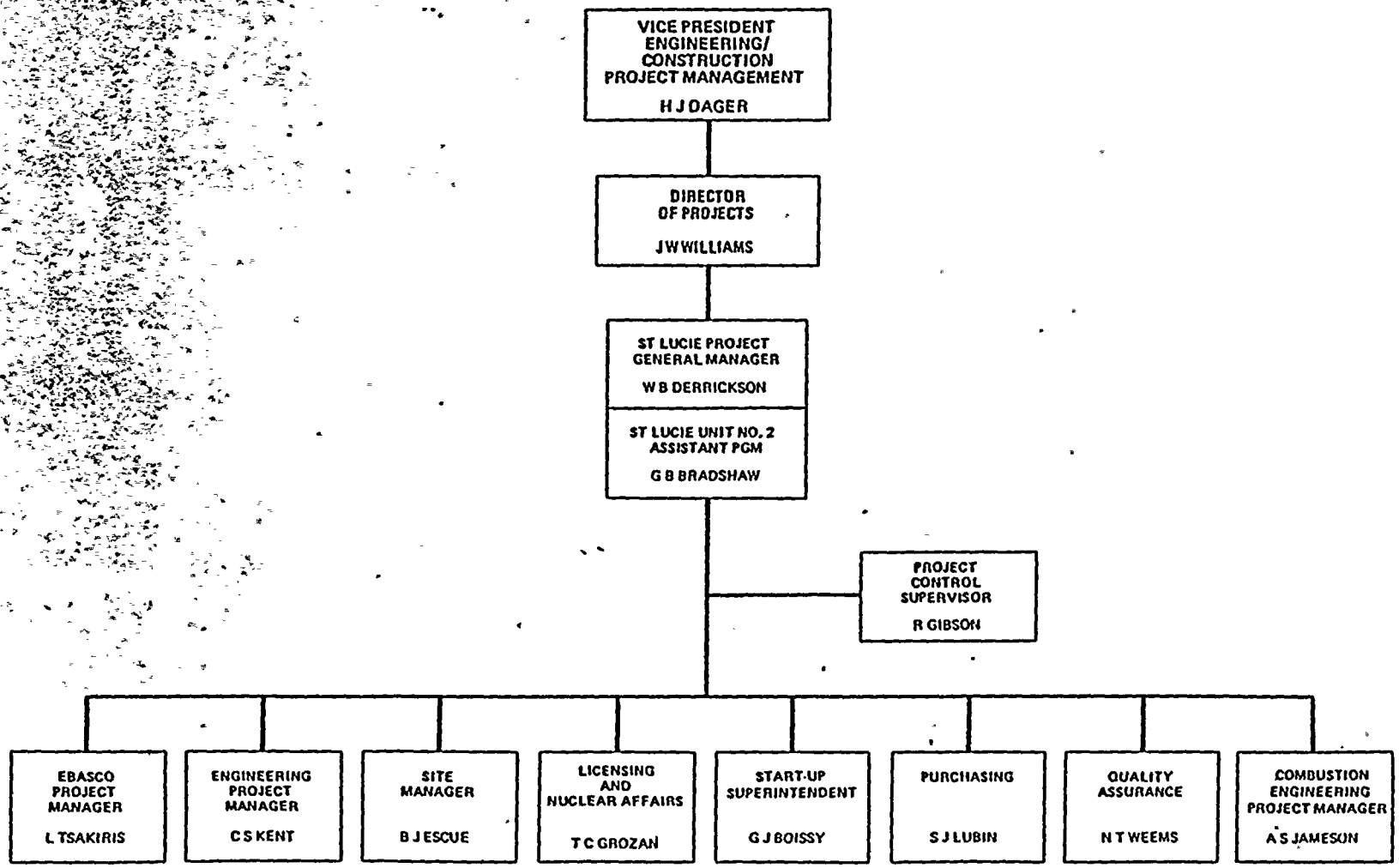
PURPOSE OF THE MEETING

TO OBTAIN AN NRC LICENSING SCHEDULE WHICH SUPPORTS THE ST. LUCIE UNIT 2 PROJECT SCHEDULE

St. Lucie Nuclear Generating Station
Unit No. 2
PROJECT DESCRIPTION

- REPLICATE OF ST. LUCIE UNIT NO. 1
- COMBUSTION ENGINEERING – PRESSURIZED WATER REACTOR NUCLEAR STEAM SUPPLY SYSTEM
- WESTINGHOUSE TURBINE GENERATOR
- ARCHITECT/ENGINEER – EBASCO SERVICES INC.
- CONSTRUCTOR – FLORIDA POWER & LIGHT CO./ EBASCO SERVICES INC. – INTEGRATED ORGANIZATION
- LOCATION: HUTCHINSON ISLAND, ST LUCIE COUNTY, FLORIDA
- SCHEDULED COMMERCIAL OPERATION–MAY, 1983

PROJECT ORGANIZATION CHART



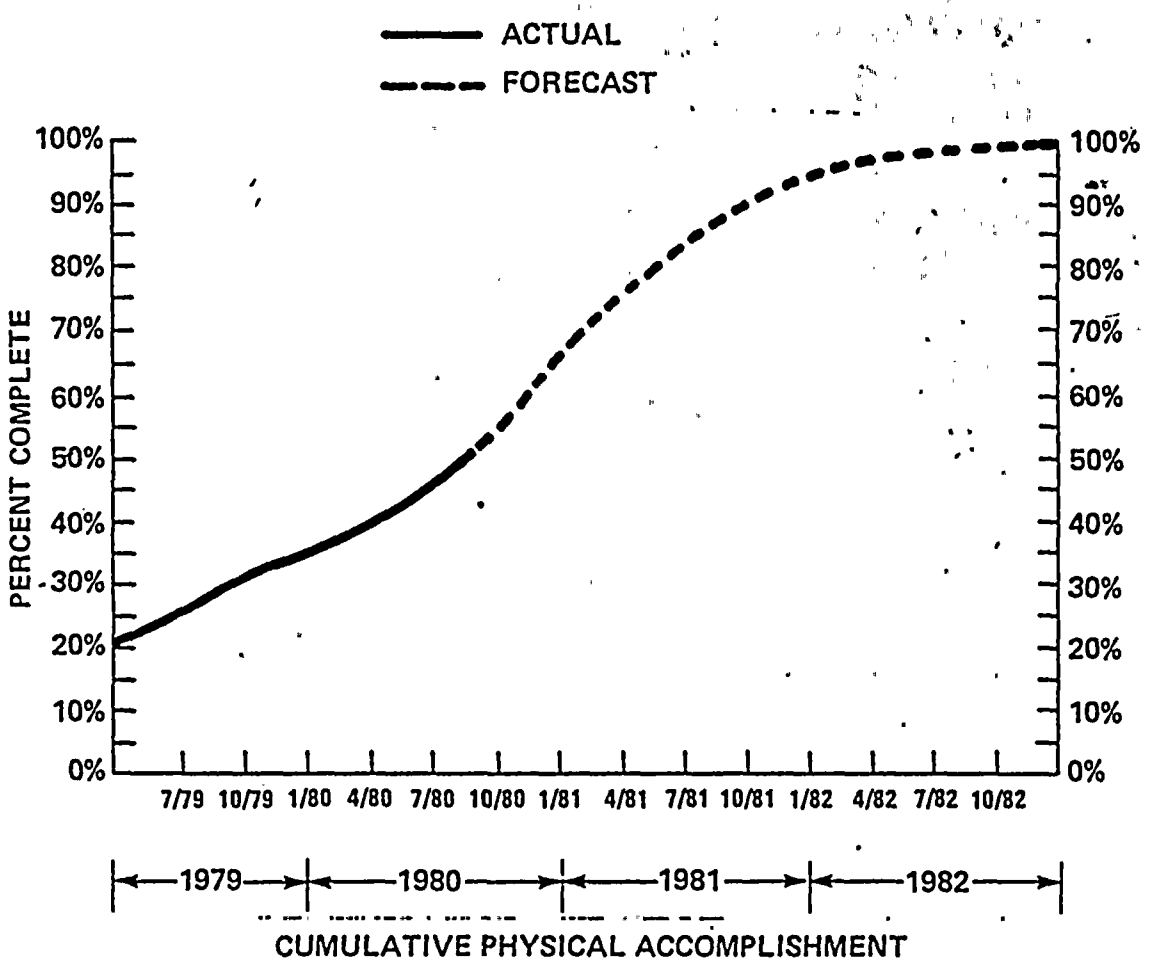
ST. LUCIE UNIT # 2

STATUS

PROJECT QUANTITY STATUS

DESCRIPTION	PHYSICAL PERCENT COMPLETE AS OF 7/31/80
APPROX % OF MAJOR EQUIPMENT INSTALLED	85.0
REINFORCING STEEL	82.9
ELECTRICAL CABLE TRAY	70.1
CONCRETE	78.3
PIPING 2" AND UNDER	16.8
PIPING 2-1/2" AND ABOVE	48.1
POWER CABLE PULLING	6.1
CONTROL CABLE PULLING	3.2

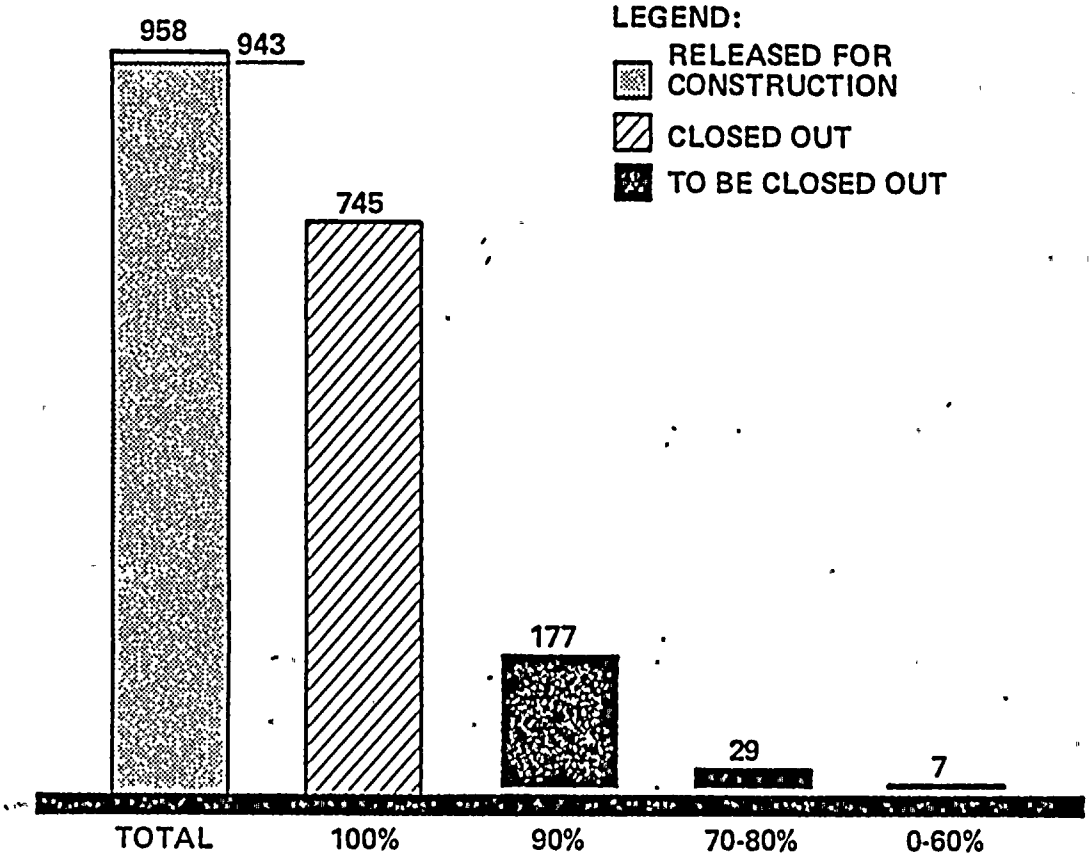
PROJECT PHYSICAL ACCOMPLISHMENT



MANUAL MANHOUR SUMMARY
(Force Account and Subcontract)

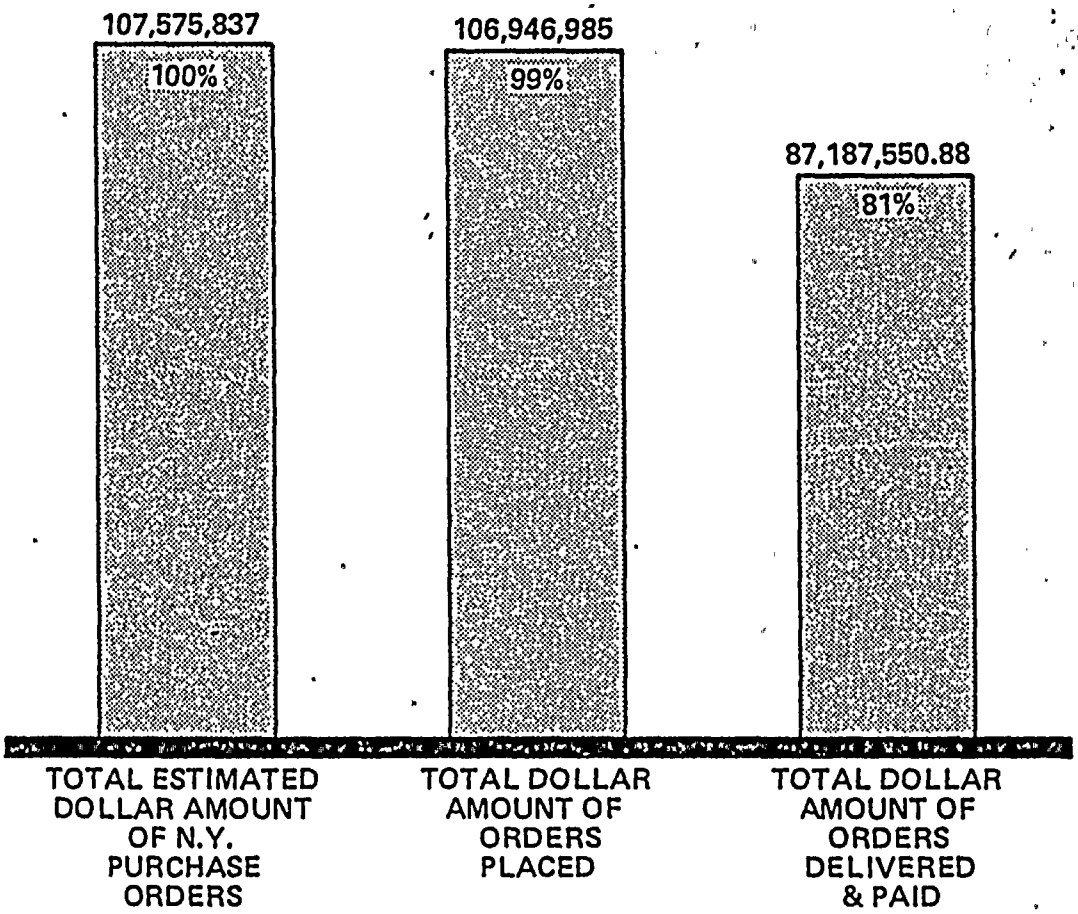
ESTIMATED MANHOURS	13,098,000
MANHOURS EXPENDED 6/80	6,028,000
MANHOURS TO BE EXPENDED BY 12/81	11,103,000
AVERAGE STAFFING LEVEL REQUIRED NEXT 1-1/2 YEARS	1,700
CURRENT CRAFT STAFFING LEVEL (2 SHIFTS)	2,000

STATUS OF DRAWINGS
8/31/80



MATERIAL DELIVERY STATUS
(DOLLARS)

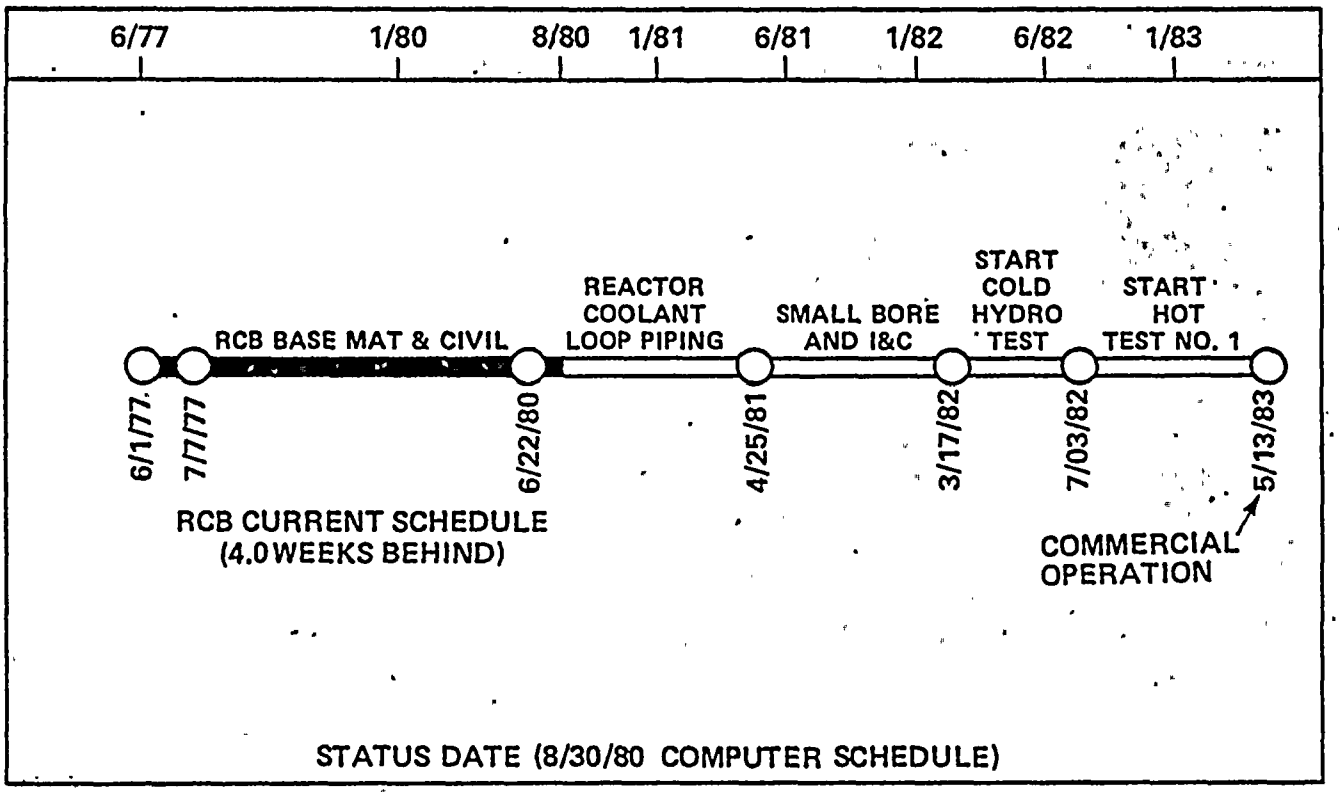
8/31/80



ST. LUCIE UNIT # 2

SCHEDULE

PROJECT CONSTRUCTION/START UP
(Actual/Target Schedule Comparison)



COMPLETED MILESTONE ANALYSIS

SCHEDULED		ACTUAL
5/2/77	CONSTRUCTION PERMIT	5/2/77
7/6/77	COMPLETE RCB BASEMAT	7/7/77
10/25/77	COMPLETE INTAKE BASEMAT	10/27/77
	COMPLETE TGB BASEMAT	11/29/77
1/4/78		
3/1/78	COMPLETE RAB BASEMAT	3/15/78
	START RCB LINER	12/21/77
1/18/78		
	POST WELD HEAT TREATMENT	9/20/78
12/6/78		
	START RCB INTERNAL CONCRETE	11/3/78
1/17/79		
5/9/79		
	COMPLETE FHB BASEMAT	7/20/79
6/18/80	SET NSSS COMPONENTS	6/22/80

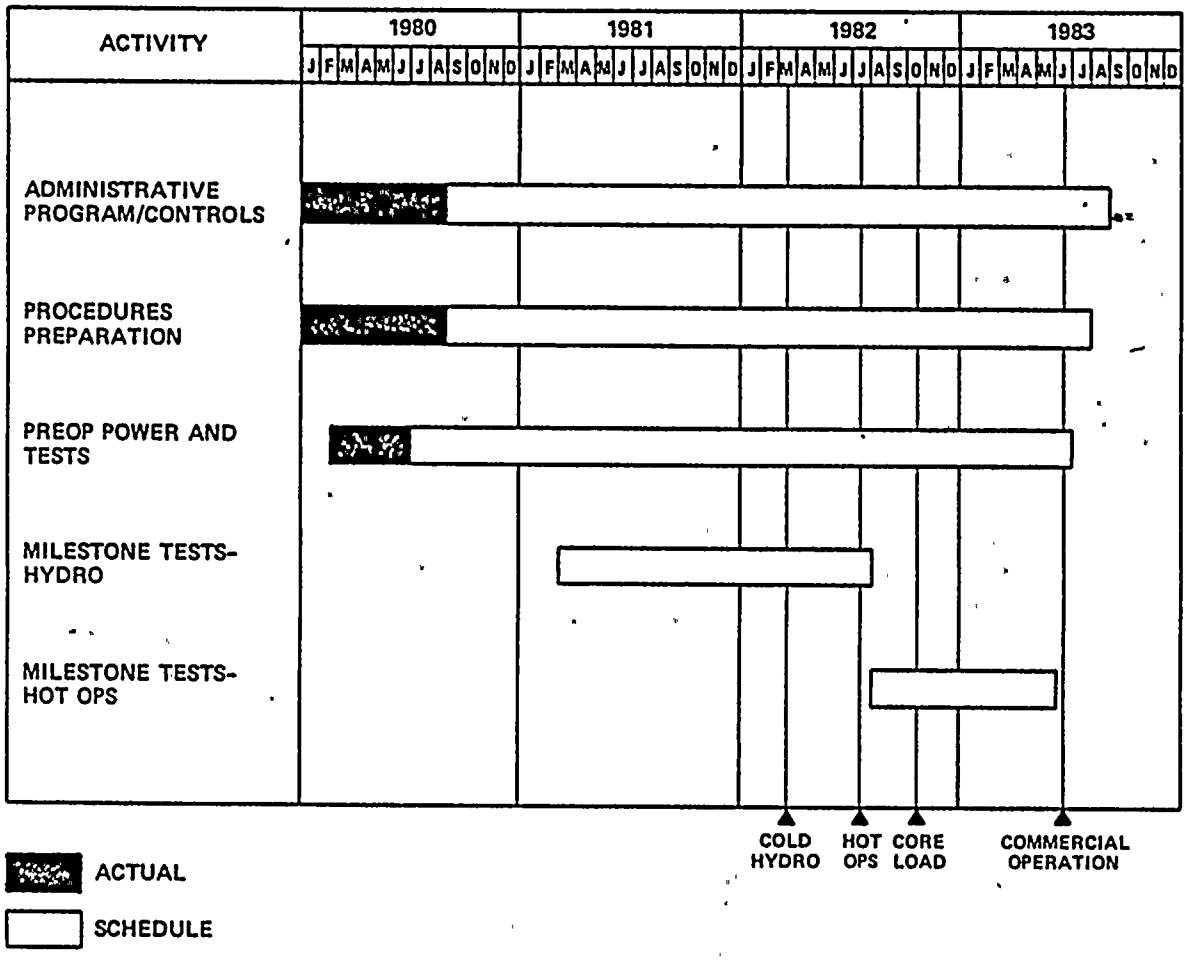
1980 & 1981 REMAINING MILESTONES

ITEM	SCHEDULE	% COMPLETE
COMPLETE RCB OPERATING FLOOR AT 62.0'	9/23/80	52.0
SET CONTAINMENT VESSEL DOME	9/26/80	52.0
COMPLETE RAB EXTERIOR CONCRETE	12/15/80	63.0
COMPLETE RC LOOP LARGE BORE PIPING	3/14/81	72.0
COMPLETE REFUELING WATER TANK	4/30/81	75.5
COMPLETE EXTERIOR SHIELD WALL DOME CONCRETE	9/06/81	88.0
INTAKE TURNOVER (CTO)	9/25/81	88.0
COMPONENT COOLING WATER TURNOVER (CTO)	10/11/81	90.0
PLACE TURBINE GENERATOR ON TURNING GEAR	12/15/81	93.0
COMPLETE OCEAN DISCHARGE PIPE	12/25/81	93.0

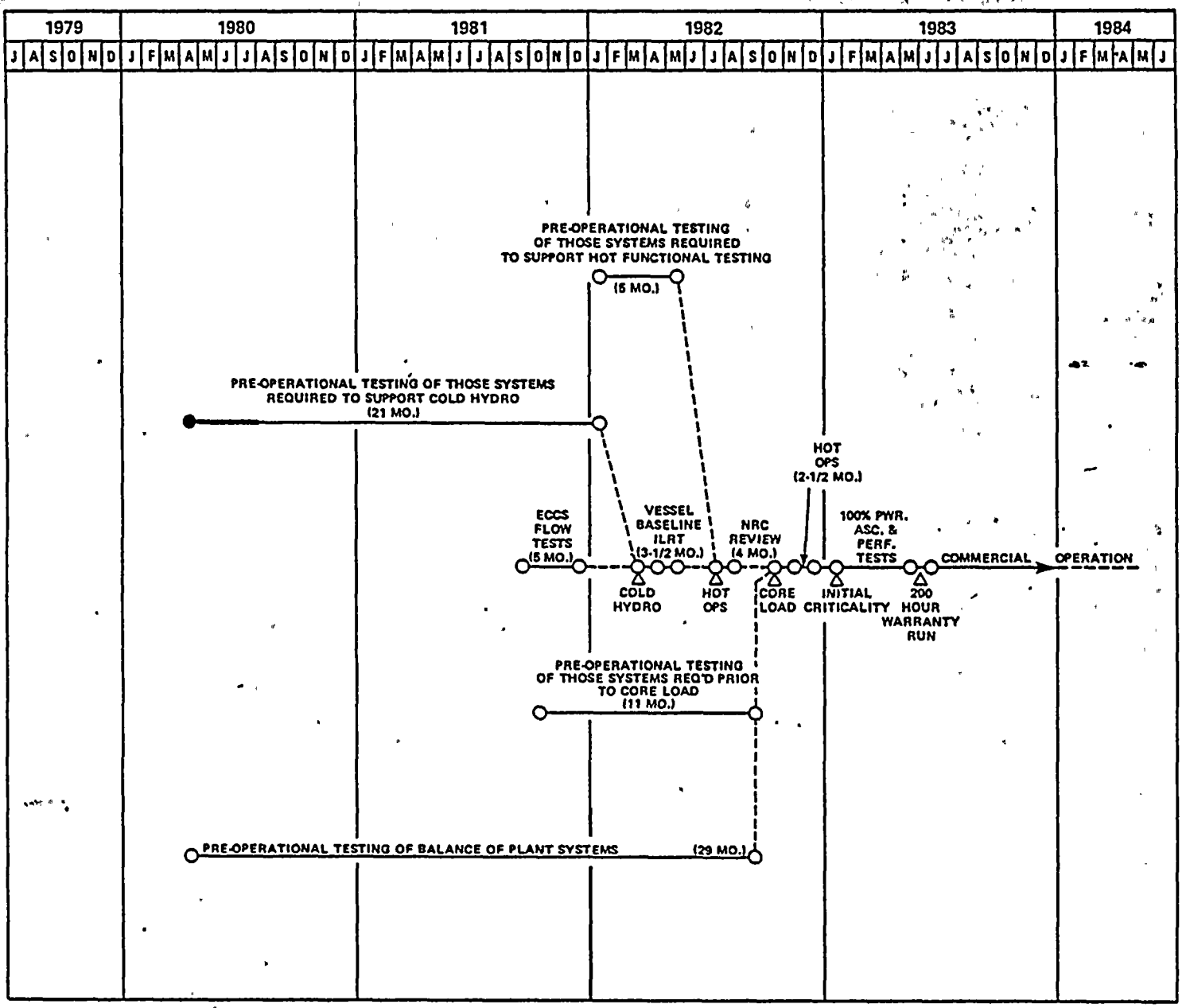
1982 REMAINING MILESTONES

ITEM	SCHEDULED	% COMPLETE
DIESEL GENERATOR INITIAL RUN (CTO)	1/13/82	94.5
SECONDARY HYDRO	1/21/82	94.5
COMMENCE COLD HYDRO	3/17/82	96.2
START HOT OPERATIONS	7/03/82	98.6
COMMENCE CORE LOAD	10/28/82	99.4

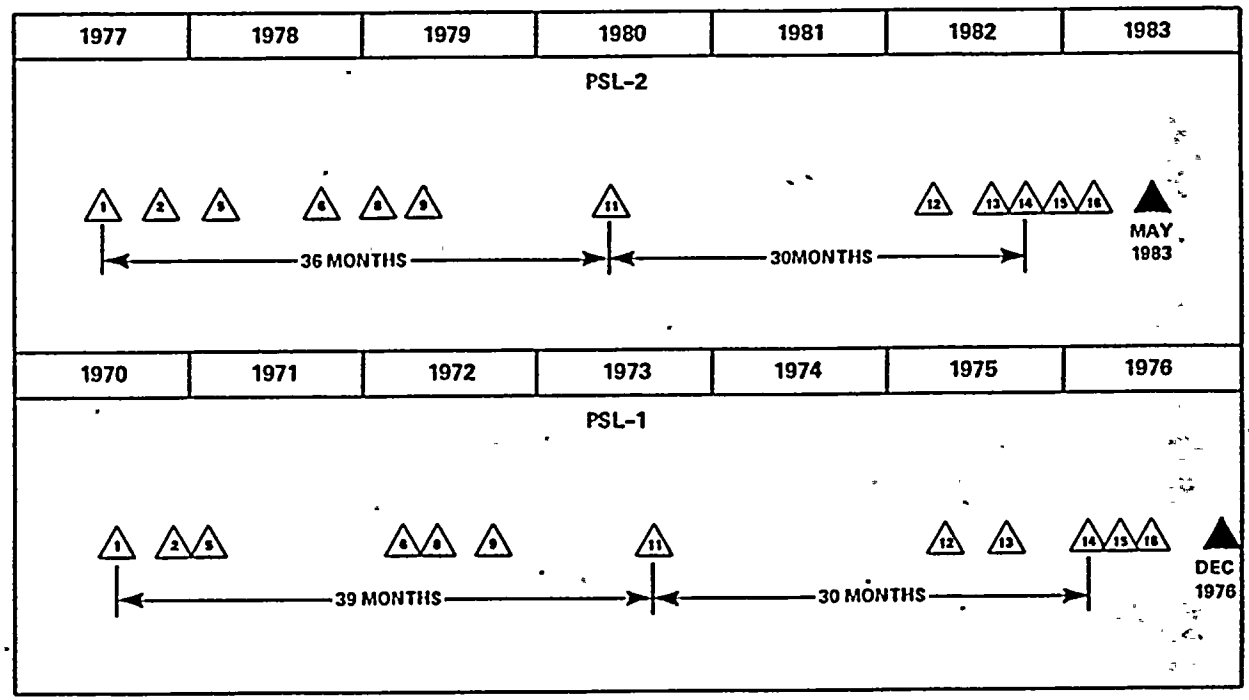
START-UP PROGRAM SCHEDULE



PRE-OPERATIONAL TEST MILESTONE SCHEDULE



UNIT #1 VS. UNIT #2 SCHEDULE MILESTONES



1. START RCB BASE MAT CONC.
2. START INTAKE STRUCTURE BASE MAT CONC.
3. START RAB BASE MAT CONCRETE
4. COMP ERECT & TEST STEEL CU TO EL 149'
5. START RCB INTERNAL CONCRETE
6. START FHB BASE MAT CONCRETE
11. START SETTING NSSS MAJOR EQUIPMENT
12. COMMENCE COLD HYDRO
13. START HOT OPS #1
14. COMMENCE CORE LOAD
15. START CRIT PERFORMANCE TESTS
16. COMMENCE POWER ESCALLATION
- COMMERCIAL OPERATION

PROJECT SCHEDULE ASSURANCE

- SITE MATERIAL STATUS MEETINGS
- EARLY START ACTIVITY STATUS REVIEWS
- ACHIEVEMENT OF ADDITIONAL SCHEDULED MILESTONES
- SCHEDULE ANALYSIS AND REVIEW TASK FORCE
- UPDATED INTEGRATED CONSTRUCTION/STARTUP SCHEDULE
- IMPLEMENTATION OF COMPUTERIZED SYSTEMS FOR WELDING AND CABLE TRACKING
- MANAGEMENT SERVICES AND CONSTRUCTION METHODS OPERATION ANALYSES
- SCOPE CHANGE REVIEW AND CONTROL
- NRC MODEL ANALYSIS
- COMPARISON TO OTHER JOBS & ST LUCIE #1

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ST. LUCIE UNIT # 2

LICENSING

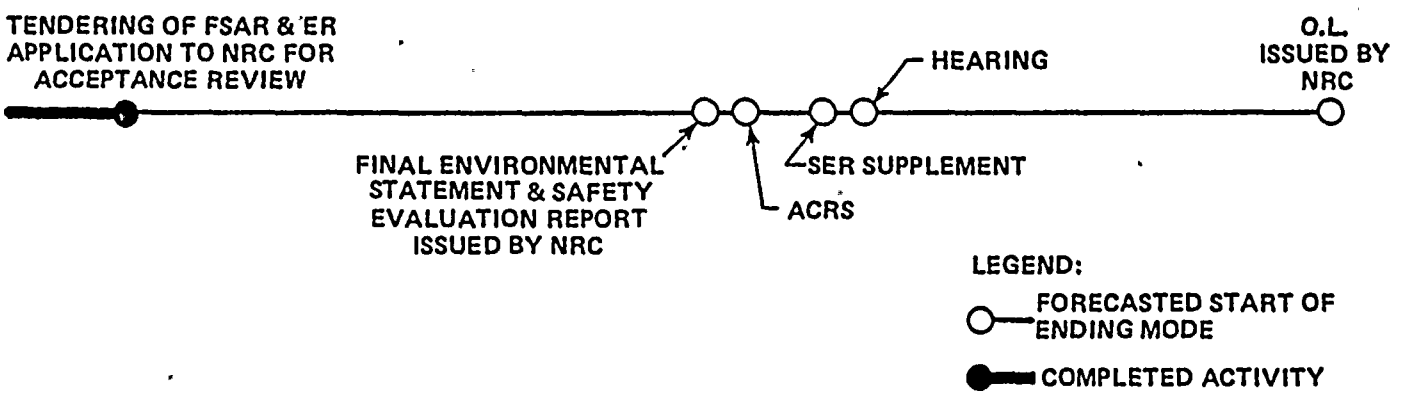
PURPOSE OF NRC/FP&L LICENSING PRESENTATION

- MAINTAIN SCHEDULAR COMMITMENTS WITH RESPECT TO PLANT STARTUP, FORECASTED LOAD GROWTH AND DECREASE DEPENDENCE ON FOREIGN OIL SUPPLIES.
- REDUCE NRC MANPOWER REQUIREMENTS TO ACHIEVE AN O.L.
- SHORTEN THE TIME FROM DOCKETING TO O.L.
- PRESENT PROPOSALS FOR THE REVIEW PROCESS

LICENSING PROJECT SCHEDULE - FSAR, ER, O.L.

1978												1979											
J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31

1980												1981												1982											
J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67



COMPARISON OF WATERFORD–3 AND ST. LUCIE UNIT#2 SCHEDULE

	ESTABLISHED W-3 DATES	COMPARABLE SL-2 DATES
O.L.	10/82	11/82
HEARINGS	10/19/81	11/81
SER SUPPLEMENT	9/18/81	10/81
ACRS	7/10/81	8/81
SER ISSUANCE	6/01/81	7/81
TRANSMITTED OF ALL NRC QUESTIONS	12/22/80	1/81

METHOD/OPTIONS FOR ACCELERATED REVIEW

1. DRAFT SER WITH OPEN ITEMS LIST

2. ACCELERATED Q1, Q2 WITH ACCELERATED RESPONSES BY APPLICANT.

3. NRC ACCEPTANCE/REVIEW OF SL-2 AS A REPLICATE OF SL-1

4. DESIGN REVIEW PRESENTATION

DRAFT SER WITH OPEN ITEMS LIST

- MEB IS ACCOMPLISHING NOW ON WATERFORD-3
- SUBMIT DRAFT SER AND OPEN ITEMS LIST
- MEETING TO REVIEW/RESOLVE DRAFT SER AND OPEN ITEMS
- FINAL SER ISSUED
- OUTSTANDING ITEMS GOING TO ACRS

<u>ADVANTAGES</u>

- SHOULD ELIMINATE ROUND 1 AND 2 QUESTIONS
- ESTABLISHES DIRECT DIALOGUE BETWEEN NRC AND APPLICANT

ACCELERATED ROUND 1 AND 2 QUESTIONS/RESPONSES

- BEING DONE ON WATERFORD-3 PRESENTLY (AS OF 8/13/80)

<u>ADVANTAGES</u>

- SPEED UP THE REVIEW PROCESS

REPLICATION BETWEEN ST. LUCIE UNITS 1 AND 2

- DESIGN IS A REPLICATION OF ST LUCIE UNIT 1
- FP&L WILL IDENTIFY DIFFERENCES BETWEEN UNIT 1 AND UNIT 2
- NRC WOULD AGREE TO REVIEW ONLY DIFFERENCES
- COULD LEND ITSELF TO ACCELERATED REVIEW AS OUTLINED ABOVE

<u>ADVANTAGE</u>

- REVIEW OF A DELTA DESIGN SHOULD ACCELERATE REVIEW

DESIGN REVIEW PRESENTATION

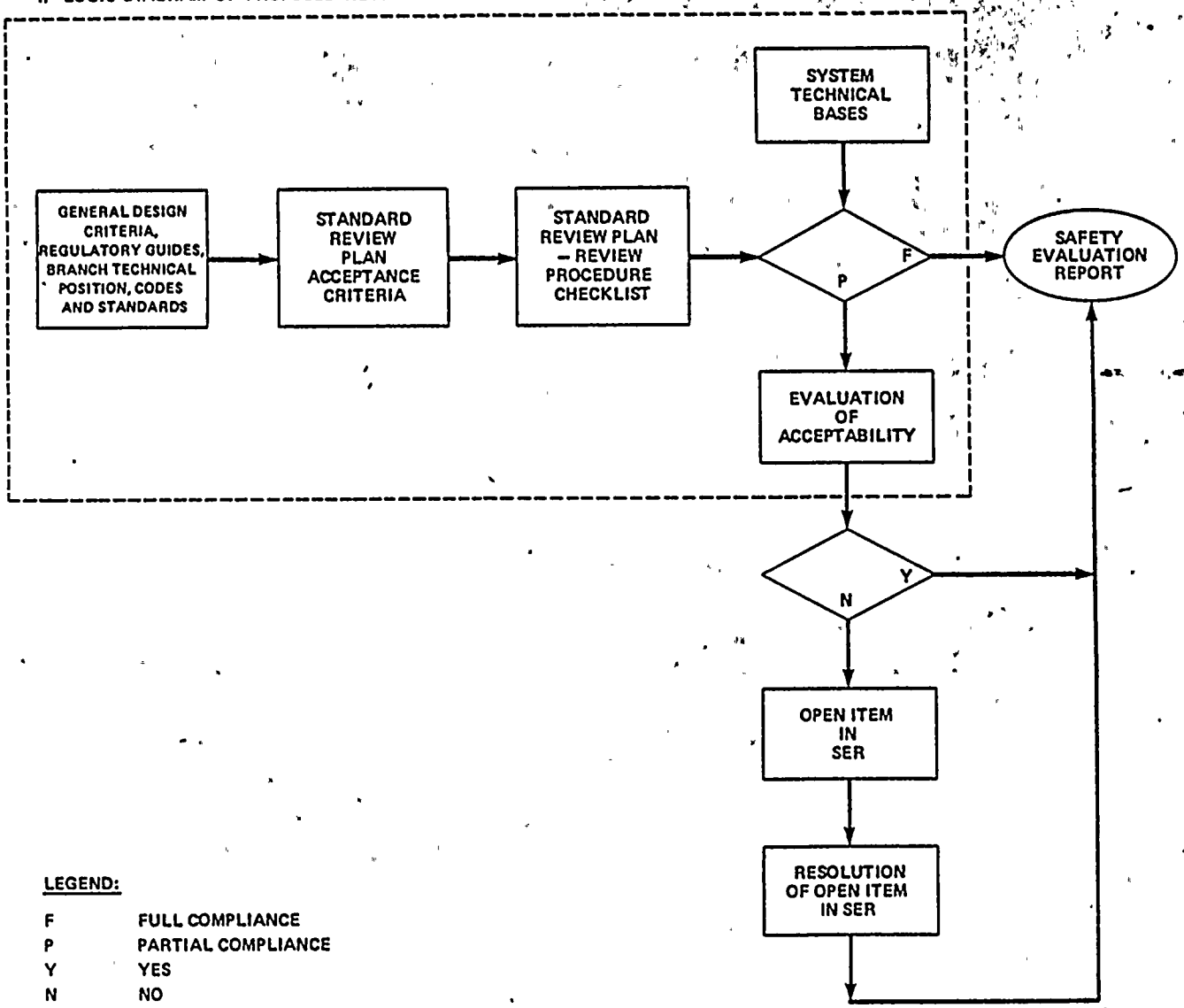
- REVIEW OF SYSTEM TECHNICAL BASES IN LIGHT OF STANDARD REVIEW PLAN, APPLICABLE REGULATORY GUIDES, BRANCH TECHNICAL POSITIONS, GENERAL DESIGN CRITERIA, STANDARDS, ETC.
- SYSTEM/LAYOUT & DESIGN BASES PRESENTATION TO FACILITATE DESIGN REVIEW
- ADVANCE COPY OF PRESENTATION TO NRC FOR REVIEW/COMMENT
- NRC COGNIZANT BRANCH PERSONNEL PRESENT AT ALL MEETINGS
- ALLOWS NRC TO WRITE SERS'

<u>ADVANTAGES</u>

- SHOULD ELIMINATE ROUND 1 AND 2 QUESTIONS
- ESTABLISHES DIRECT DIALOGUE BETWEEN NRC AND APPLICANT
- ASSIST REVIEWER IN UNDERSTANDING COMPLEX DESIGNS

SAMPLE OF THE TYPE OF REVIEW PROPOSED

1. LOGIC DIAGRAM OF PROPOSED REVIEW



LEGEND:

F	FULL COMPLIANCE
P	PARTIAL COMPLIANCE
Y	YES
N	NO