STRATEGIC PETROLEUM RESERVE

ENGINEERING CHANGE PROPOSAL
SUMMARY SHEET
CLASS I CHANGE

ECP NUMBER	TITLE
SJ-M/O-4649	**Distribution Enhancement Plains/LOCAP Upgrade WI 20 W1 and WI 20 F2**

BUDGET SOURCE	AUTHORITY
☐ SPR BLI _____ ☐ CONTRACTOR BASELINE ☐ AUD ☐ OTHER: Lease Contractor	☒ PCCB ☐ ECC

	SCHEDULE	TOTAL ESTIMATED COST OF CHANGE		
	☐ YES MILESTONE NUMBER _____ CMCR NUMBER ☐ NO		FY 06	FY 07
		DESIGN Construction Management CONSTRUCTION		
		TOTAL	$ 200,000	

PCCB/ECC SIGNATURES	DISPOSITION			COMMENTS CONDITIONS/LIMITATIONS
	CONCUR	NON CONCUR	DATE	
DOE SENIOR SITE OFFICIAL				
APM TECHNICAL ASSURANCE	✓		6/5/06	
APM SYSTEMS AND PROJECTS	✓		15 JUN 06	
APM MAINTENANCE AND OPERATIONS			6/15/06	
APM MANAGEMENT AND ADMINISTRATION	✓		6/15/06	
DOE CMO				
PROJECT MANAGER				
DEPUTY ASSISTANT SECRETARY - SPR				

PCCB/ECC ACTION

☑ FULL APPROVAL ☐ CONDITIONAL/LIMITED APPROVAL ☐ DISAPPROVAL

ECP EXECUTIVE SUMMARY

Change Request Number : 04 SJ-M/O-4649

Title : Distribution Enhancement Plains/Locap, Upgrade WI 20 W1 and WI 20 F2

Executive Summary:
The present St. James Terminal (Sugarland) valves WI 20 W1 and WI 20 F2 are not double block and bleed valves. The leak-by from these valves causes oil delivery issues in the terminal. Prior to the proposed distribution enhancements upgrade, this was a nuisance due to oil going someplace other than intended, but was still contained at the St James Terminal. The Distribution Enhancements upgrade, directed by the PMO, provides tie-ins to LOCAP and the new Plains terminals in the event of a domestic supply disruption as experienced during hurricanes Katrina and Rita. These existing valves would result in oil accountability issues due to oil, already measured for off-site delivery, potentially leaking back into the terminal. This ECP will replace the existing valves with double block and bleed valves resolving this oil accountability issue.

DOE JBB

Implementation plan:
DOE will reimburse Shell for the purchase and installation of the double block and bleed valves. (See Exhibit A)

Implementation Cost: (currently being developed by Shell)

	2006
Design:	
Construction Management:	
Construction:	
GFE:	
LOE:	
Total:	

Life Cycle Cost:

Impact Summary:

Logistics:

Level I, II, III Criteria:

Codes, regulations, permits, etc.:

Safety, Environmental, Fire Protection Systems, Security:

Contract completion dates:

GFE:

Schedules:

Task # (s): BC-06-039

STRATEGIC PETROLEUM RESERVE
ENGINEERING CHANGE PROPOSAL

ECP NUMBER	ECP TITLE	
SJ-M/O-4649	**Distribution Enhancement Plains/Locap, Upgrade WI 20 W1 and WI 20 F2**	PAGE 1 OF 3

CONTRACTOR CHANGE NO. / REV.	INITIATED BY	DATE	SUBMITTED BY	DATE
04	**Mike Curole**	**5/1/2006**	**Jeff Barab**	**5/18/2006**
PRIORITY	ORG./CONTRACTOR	PHONE NO.	ORG./CONTRACTOR	PHONE NO.
☒ EMERGENCY	**DOE**	**504-734-4120**	**SPLC**	**713-241-0765**

VALUE ENGINEERING	DRAWDOWN CRITICAL	ROM ESTIMATE
☐ VEP (MANDATORY)	☒ YES	**$200,000**
☐ VECP (VOLUNTARY)	☐ NO	

☐ URGENT

☐ ROUTINE

DESCRIPTION:

PROBLEM / EXISTING CONFIGURATION:
The present St. James Terminal (Sugarland) valves WI-20-W1 and WI-20-F2 are not double block and bleed valves. The Distribution Enhancements upgrade, directed by the PMO, provides tie-ins to LOCAP and the new Plains terminals in the event of a domestic supply disruption as experienced during hurricanes Katrina and Rita. These existing valves would result in oil accountability issues due to oil, already measured for off-site delivery, potentially leaking back into the terminal. This ECP will replace the existing valves with double block and bleed valves resolving this oil accountability issue.

PROPOSED SOLUTION / ENHANCEMENT:
Upgrade the current WI-20-W1 and WI-20-F2 30" ANSI 150# valves with double block and bleed valves. (See Exhibit A)

NOTE:
In order to expedite this project such that installation may occur along with other planned work at the site 3Q-4Q06, approval of this ECP will authorize Shell to order the necessary equipment. Final engineering and installation estimates are currently being developed and will be provided to the DOE for approval prior to construction.

REASON / JUSTIFICATION:
This is an additional distribution enhancement, directed by the ~~PMO~~ DOE JBB, to support a domestic crude oil supply disruption as experienced during hurricanes Katrina and Rita and supports the Distribution Enhancements ECP BC-06-026.

CI'S AFFECTED:

TECHNICAL ANALYSIS / RECOMMENDATION:

IMPLEMENTATION METHOD:
☒ SUBCONTRACT
☐ M&O LABOR (LOE)
☐ COMBINATION

ENGINEERING	DATE	DOE SSR	DATE
Scott [illegible]	05/17/06		☐ CONCUR ☐ NONCONCUR

STRATEGIC PETROLEUM RESERVE
ENGINEERING CHANGE PROPOSAL
CONFIGURATION CHANGE AFFECTED REPORT

TO BE COMPLETED BY TECHNICAL REVIEW PROCESS, ENGINEERING AND CONFIGURATION MANAGEMENT ORGANIZATION DEFINED PROCESS

ECP NO.:	CONTRACTOR CHANGE NO. / REV.:	CHANGE CLASSIFICATION:	
SJ-M/O-4649	04	☒ CLASS I ☐ CLASS II	PAGE 2 OF 3

FUNCTIONS AFFECTED		DOCUMENTS AFFECTED	
YES/NO	ITEM	YES/NO	ITEM
NO	☒ LEVEL I ☐ LEVEL II ☐ LEVEL III CRITERIA		**ELECTRICAL (cont'd)**
NO	PERFORMANCE CRITERIA	NO	308 - WIRING DIAGRAMS
NO	RAM	NO	310 - GROUNDING
YES	INTERFACE CHARACTERISTICS	NO	311 - CONDUIT & CABLE SCHEDULES (INCLUDING INST.)
NO	I/O POINTS	NO	313 - MCC/SWITCH GEAR ELEVATION & SCHEDULE
NO	DOE LEVEL I, II, III SCHEDULES	NO	315 - CATHODIC PROTECTION
NO	GUARANTEES/DELIVERABLES	NO	350 - STANDARDS
NO	☐ SAFETY/ ☐ ENV / ☐ FP		**INSTRUMENTATION**
NO	SECURITY REQUIREMENTS	NO	401 - BLOCK DIAGRAM
NO	OPCS SOFTWARE	NO	402 - LOOP DIAGRAMS
NO	OPCS HARDWARE	NO	403 - INSTRUMENT PLANS AND DETAILS
NO	OPCS FIRMWARE	NO	404 - INSTRUMENT WIRING DIAGRAM
NO	SETPOINTS/RANGES	NO	409 - INSTRUMENT INDEX
NO	DIP SWITCH SETTINGS/JUMPERS	NO	450 - STANDARDS
NO	MASTER CI LIST		**MAPPING**
NO	WELLHEAD CONFIGURATION	YES	501 - ALIGNMENT SHEETS
NO	SPARES/PROVISIONING REQUIREMENTS	YES	509 - PIPELINE DRWGS (MAINLINE VALVES, DRIPS, SCRAPER, TRAPS, ETC.)
YES	GOVERNMENT FURNISHED EQUIPMENT	NO	550 - STANDARDS
NO	ENERGY USAGE		**ARCHITECTURAL**
NO	OPERATIONS MODELS	NO	720 - ELEVATIONS AND FLOOR PLANS
NO	OTHER	NO	750 - STANDARDS
	DOCUMENTS AFFECTED		**DATA SYSTEMS**
	ITEMS	NO	801- PHYSICAL DIAGRAMS
	PIPING	NO	802 - LOGICAL / BLOCK DIAGRAMS
YES	101 - PROCESS FLOW DIAGRAMS	NO	810 - SYSTEM / DEVICE CONFIGURATION SETTINGS
YES	102 - MECHANICAL FLOW DIAGRAMS	NO	820 - CYBER SECURITY
YES	103 - PIPING AND INSTRUMENTATION DIAGRAMS (P&ID'S)	NO	850 - STANDARDS
NO	104 - UTILITY FLOW DIAGRAMS	NO	870 - EQUIPMENT SPECIFICATIONS
YES	105 - GENERAL PIPING PLANS	NO	880 - SYSTEM / APPLICATION SPECIFICATIONS
NO	106 - AREA PLANS (MECHANICAL EQUIPMENT LOCATION)		**DOCUMENTATION**
NO	122 - WELL HEAD DRAWINGS	NO	900 - RESERVED
NO	123 – WELL COMPLETION CONFIGURATION DRAWINGS	NO	901 - TECHNICAL/PERFORMANCE/DESIGN CRITERIA
YES	130 - VALVE LIST	YES	910 - DESIGN DESCRIPTION/BASIS
YES	135 - LINE LIST	NO	911 - PROCESS SET POINT DOCUMENTS
NO	140 - PSV LIST	NO	912 - EQUIPMENT LIST
NO	150 - STANDARDS	YES	913 - MOV LIST
	CIVIL/STRUCTURAL	NO	915 - ELECTRICAL SAFETY
NO	201 - PLOT PLANS	NO	920 - I/O DOCUMENT
NO	202 - SITE WORK: GRADING (ROUGH & FINISH & DRAIN FENCING)	NO	930 - OPERATIONS MANUALS
NO	210 - FOUNDATIONS: LOCATION PLANS	NO	930 - MAINTENANCE MANUALS
NO	216 - MINES (WEEKS ISLAND ONLY)	NO	950 - STANDARD SPECIFICATIONS
NO	250 - STANDARDS	NO	970 - TASK SPECIFICATIONS
	ELECTRICAL	NO	990 - CONFIGURATION MANAGEMENT REPORTS/I.B.O.M.
NO	301 - AREA CLASSIFICATION		
NO	302 - ONE LINE DIAGRAMS		
NO	303 - SCHEMATIC DIAGRAMS		
NO	304 - POWER PLANS AND DETAILS		
NO	305 - LIGHTING PLANS AND DETAILS		
NO	307 - SUBSTATION PLANS AND DETAILS		

COMMENTS:

ENGINEERING	DATE	CONFIGURATION MANAGEMENT	DATE

STRATEGIC PETROLEUM RESERVE

ENGINEERING CHANGE PROPOSAL

SOFTWARE, HARDWARE, FIRMWARE CHANGE

CONTRACTOR CHANGE NUMBER / REV:	ECP NUMBER:	
04	SJ-M/O-4649	PAGE 3 OF 3

SOFTWARE CHANGE ANALYSIS	HARDWARE/SOFTWARE AFFECTED
	(NOTE: REDLINE CI BOM)

DISPOSITION OF PARTS

☐ REWORK SITE COMPONENTS ONLY ☐ REWORK ALL SITE COMPONENTS ☐ COMPONENTS NOT AFFECTED

☐ OTHER (DESCRIBE) ____

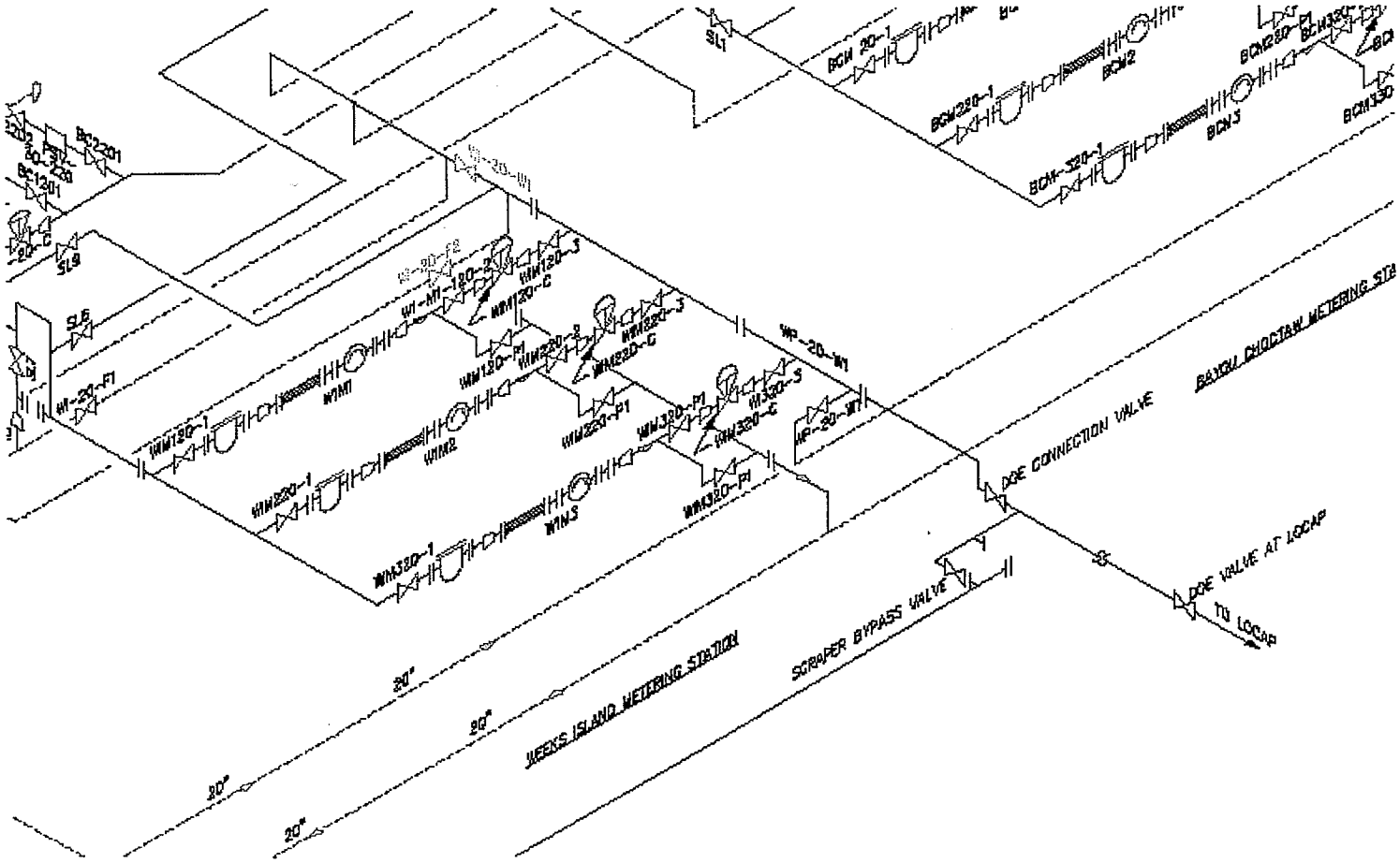
COMPONENT COMPATIBILITY (LIST COMPONENTS SEPARATELY IF COMPATIBILITY'S ARE DIFFERENT)

☐ INTERCHANGEABLE ☐ DRAWDOWN COMPATIBLE ☐ NONCOMPATIBLE

OPCS SUPPORT ENGINEER	DATE	FUNCTIONAL MANAGER	DATE

IMPLEMENTATION / TEST COMMENTS:

WITNESSED BY			DATE

TEST APPROVED BY	DATE	CHANGE RELEASE AUTHORITY	DATE

Distribution Enhancement Plains/Locap,
Upgrade WI 20 W1 and WI 20 F2
Exhibit A