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HW-78746 RD

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INTERIM PUMPING MODIFICATION REVIEW

by

J. W. Hedges

August 23, 1963

Classification Cancelled and Changed To

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By Authority of DS Lewis

CG-PR-2, 3-28-94

By DK Hanson, 4-17-94

Verified By J E Savelly 4-18-94

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100-B

<u>EQUIPMENT</u>	<u>PRESENT MAX. CAPACITY</u>	<u>EQUIP. THAT COULD BE USED</u>	<u>PROJECTED MAX. CAPACITY</u>	<u>% GAIN</u>
181-B				
2 - 900 HP 13 - 450 HP	90,000	900 HP from 181-D 600 HP pumps from 181-H	Could get over 92,000	2%
183-B				
Filter beds	90,000	Effluent from filters - this piping may be limited	90,000 - 100,000	
Process pumps	91,200	1-process pump for backwash and process from 183-H,F or D	95,000	4%
190-B				
8 at 4,500	Depends upon reactor fric- tion losses Now 89,000 +	None - must open up rear face fittings or change fuel charge	92,000 (a guess)	2%

"B" could also use - 1) Another electric driven filtered water pump.

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100-C

<u>EQUIPMENT</u>	<u>PRESENT MAX. CAPACITY</u>	<u>EQUIP. THAT COULD BE USED</u>	<u>PROJECTED MAX. CAPACITY</u>	<u>% GAIN</u>
<u>181-C</u>				
2 at 450 HP 8 at 600 HP	120,000+	2 other 600 HP pumps and motors from 181H or any of the 900 HP units from 181D	123,000 to 125,000	2 to 4%
<u>183-C</u>				
Filter beds	150,000	adequate - could be increased by replacing and rearranging filter media	in excess of 160,000	6%
<u>183 Pumping (Process)</u>				
	Have excess capacity now			
<u>190-C</u>				
10 - pumps 10,750 gpm at 453 psi pump discharge	100,200 with present hardware and fuel charge arrangement	Possibly 2-4,500 HP units from F,H,D,or DR. Bays exist - electrical supply must be checked - piping revisions needed - must be checked	105,000	5%

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100-D

<u>EQUIPMENT</u>	<u>PRESENT MAX. CAPACITY</u>	<u>EQUIP. THAT COULD BE USED</u>	<u>PROJECTED MAX. CAPACITY</u>	<u>% GAIN</u>
<u>181-D</u>				
9 at 900 HP	112,000		112,000	2%
1 at 450 HP	8,000	1 - 600 HP from "H" to replace 450	10,500 (small unit must pump through 182)	
		Could possibly add one more 600 HP		Up to 4%
<u>183-D Filter beds</u>				
Filter beds	115,000 to 120,000	-----	-----	
<u>183-D pump room</u>				
Process pumps 88,000		One more filter on water process pump	92,000	2% to 4%
<u>190-D</u>				
8 at 4,500 HP	Depends upon reactor friction losses - now - 87,700	None - must open up front and rear face fittings or change fuel charges	92,000 (a guess)	2% to

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100-DR

<u>EQUIPMENT</u>	<u>PRESENT MAX. CAPACITY</u>	<u>EQUIP. THAT COULD BE USED</u>	<u>PROJECTED MAX. CAPACITY</u>	<u>% GAIN</u>
181-D				
5 at 900 HP	72,000	3 stage impellers (new)	76,000	5%
183-DR				
Filter beds	76,000	-----	-----	--
(Additional water comes from 183-D backwash pumps)				
No pumps used from 183-DR to storage tanks				
190-DR				
8 at 4,500 HP	86,600	Must open up front and rear face fittings or change fuel charge	90,000	3% to 4%

*This document references HW-65324

JW Hedges/crf
8-26-63

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