

Inter-Office Memorandum
In Reply
Review + Comment



Date: August 15, 1979
TSG-362

*File
Pass/Vol Control
System*

Subject: Guidance on Turbine Bypass Valve Operation

To: J. G. Herbein

Location: TMI

Reference: Control of Natural Circulation Using the Turbine Bypass Valves,
J. P. Moore to R. C. Arnold, TSG-333, dated August 6, 1979

There are several conditions which can contribute to an inaccurate prediction of the required turbine bypass flow demand to maintain primary plant conditions. To compensate for the inaccurate prediction, additional guidance is required for future turbine bypass valve operation. It is GPU Technical Support's recommendation that the following guidance be used during turbine bypass valve operation.

Maintain T_h in the "A" loop between 160° F and 170° F while in the natural circulation mode steaming the "A" OTSG. The target value is approximately 165° F. If T_h in the "A" loop increases to 168° F increase the turbine bypass valve position controller setting by 2%. Monitor T_h in the "A" loop and ΔT in the "A" loop for 4 - 6 hours to establish any trend. If T_h in the "A" loop decreases to 162° F decrease the turbine bypass valve position controller setting by 2%. Monitor T_h in the "A" loop and ΔT in the "A" loop for 4 - 6 hours to establish any trend. Obtain guidance and permission from the GPU Control Room Watch and/or the Shift Supervisor whenever opening or closing MS-V25A.

Careful consideration should be given to the effects of a "B" loop 'Burp' before altering the position of MS-V25A. The "B" loop 'Burp' causes cyclic variations in the primary temperature and will, therefore, impede control of T_h in the "A" loop.

Attached are revised copies of the curves included with the reference. These curves have been biased by the difference between the calculated position and the actual position obtained after the transition had reached equilibrium. Use of these curves and the additional guidance provided above is recommended for turbine bypass valve operation.

If you have any questions concerning this matter, please contact me at Extension 3268.

John,

I have no comments on this memo. I concur with the proposed actions.

B. D. Elam
B. D. Elam

J. Wennell 8/17/79

RMM/BDE/jb
Attachments

cc:	R. C. Arnold	w/att.	F. G. Maus	w/att.	GPU Control Room Watch	w/att.
	J. G. Herbein	"	M. Konya	"	TMI-2 Control Room	"
	R. F. Wilson	"	W. H. Zewe	"	Data Reduction File	"
	D. K. Croneberger	"	J. Collins	NRC "	J. P. Moore	"
	J. R. Floyd	"	L. Rogers	B&W "		

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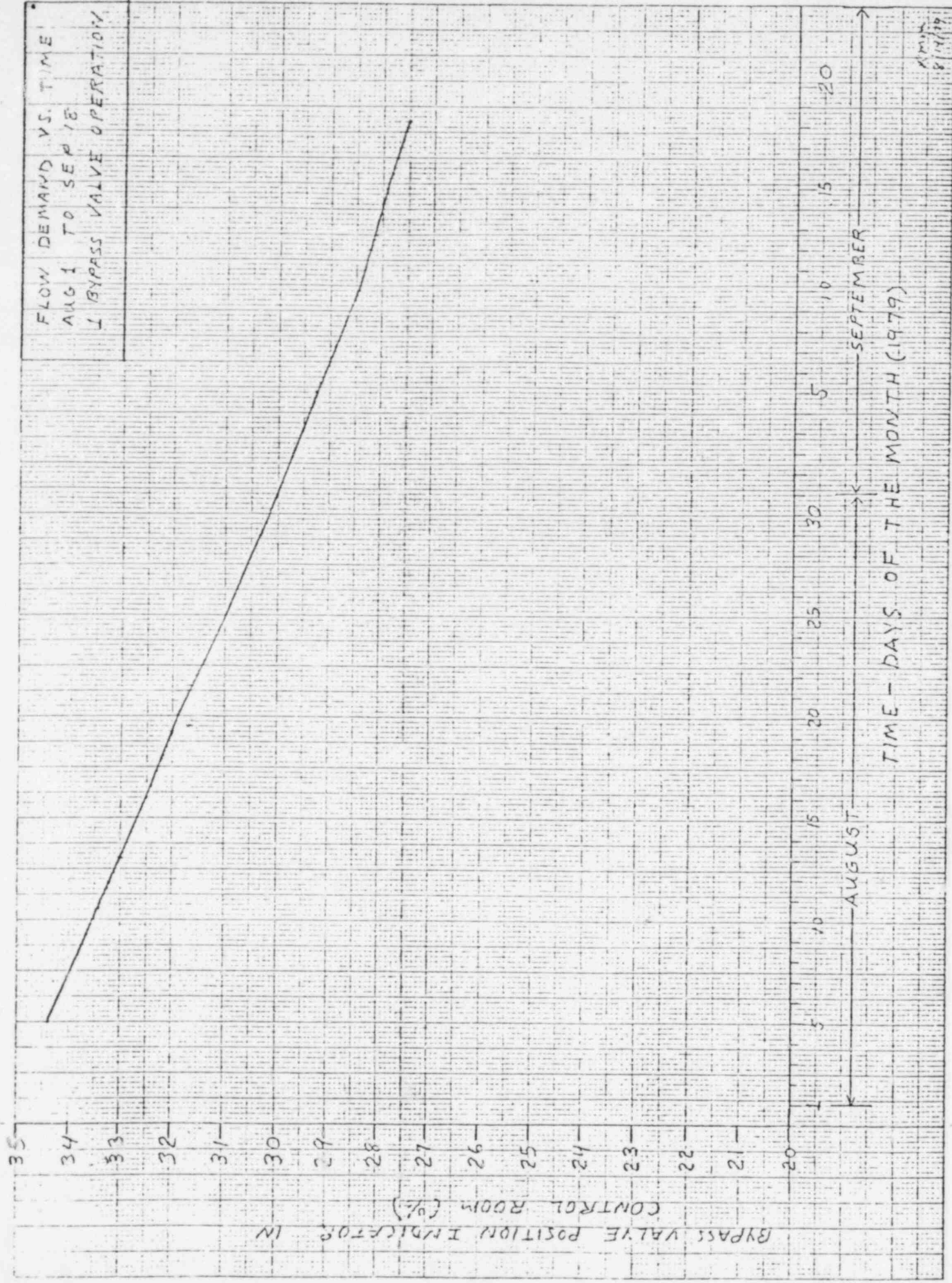


Figure 1

461510

10 X 10 1/2 TIME COUNTER
KEUFFEL & ESSER CO. MADE IN U.S.A.

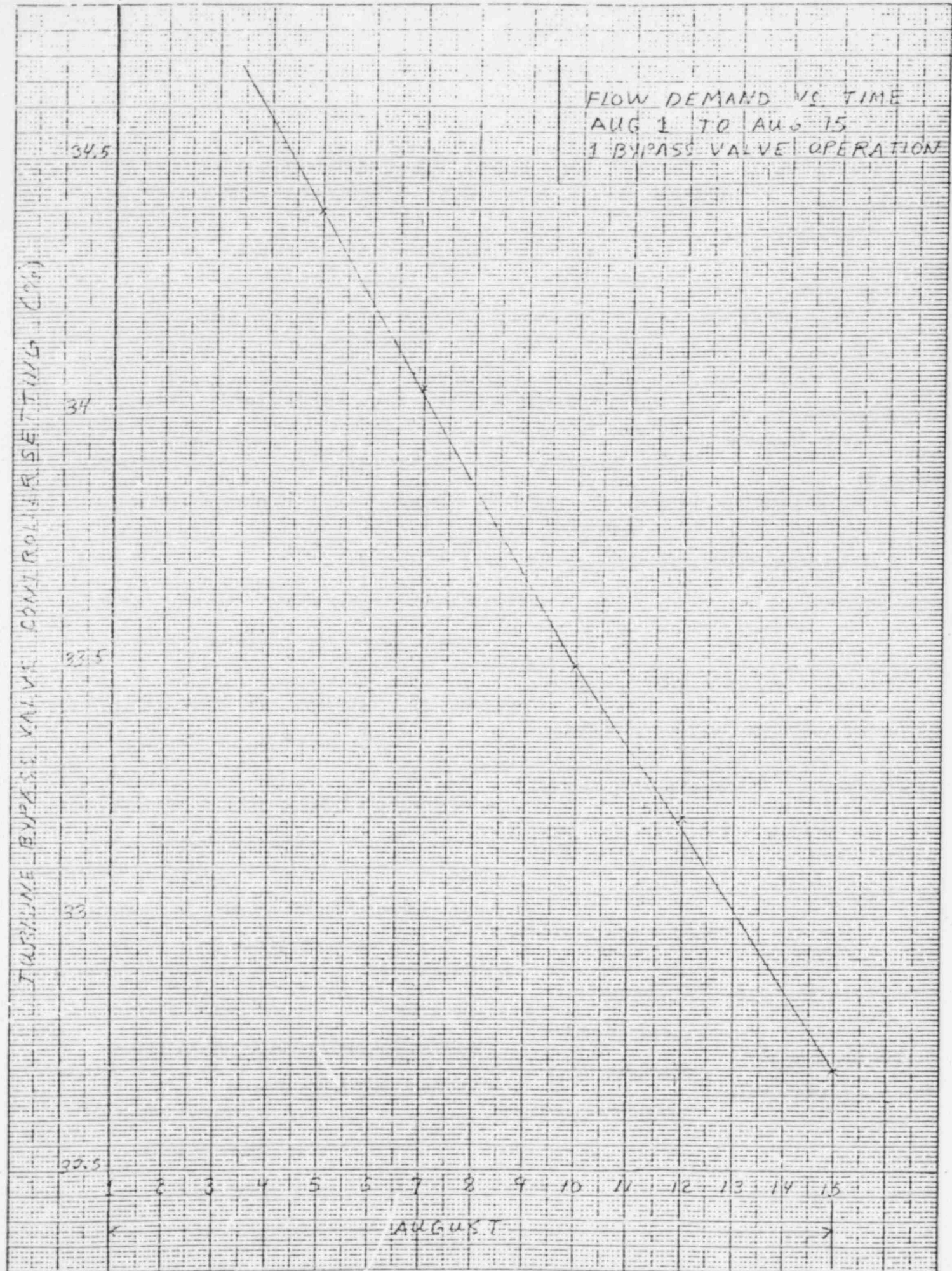


Figure 2

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10 X 15 1/2 THE CONTINENTAL KEUFTEL & ESSER CO. MADE IN USA

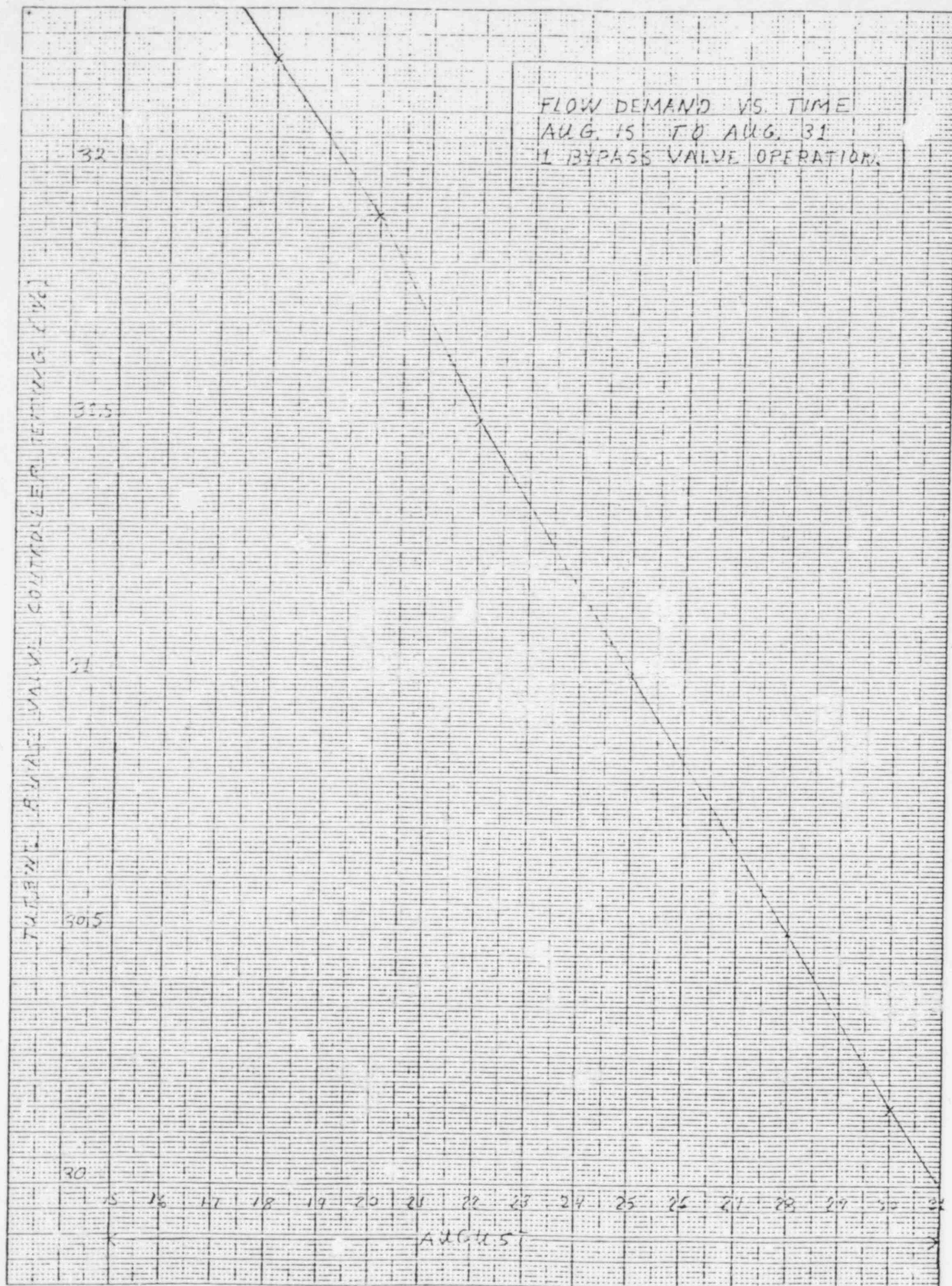


Figure 3

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10 X 10 TO THE CENTIMETER
K & E KEUFFEL & ESSER CO. MADE IN U.S.A.

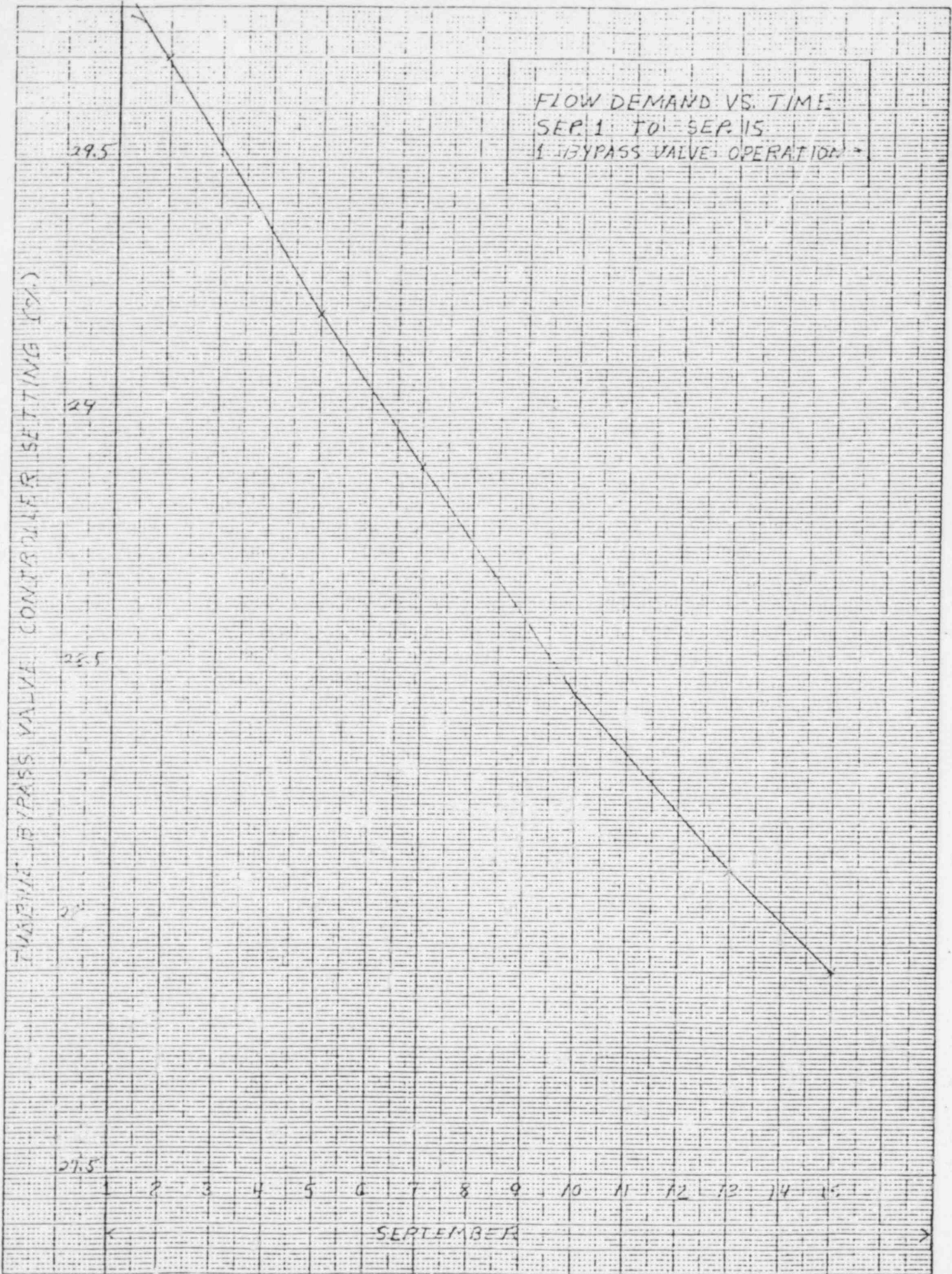


Figure 4