

DUKE POWER COMPANY
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CHARLOTTE, N.C. 28242

HAL B. TUCKER
VICE PRESIDENT
NUCLEAR PRODUCTION

TELEPHONE
(704) 373-4531

September 30, 1986

Mr. Harold R. Denton, Director
Office of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Attention: Mr. B. J. Youngblood, Project Director
PWR Project Directorate No. 4

Re: Catawba Nuclear Station
Docket Nos. 50-413 and 50-414
McGuire Nuclear Station
Docket Nos. 50-369 and 50-370

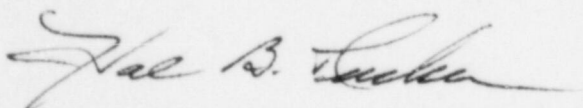
Dear Sir:

By letter dated April 25, 1986, Duke Power Company (Duke) presented a plan for the resolution of issues concerning control of combustible gasses in containment following a beyond-design-basis accident. As agreed to with the Staff, the schedule for this resolution called for the submittal of interim results on a periodic basis for Staff review. Attached to this letter you will find the first of those interim reports. This report consists of graphs of the release rates of mass and energy into the containment from the selected accident sequences which will form the basis of subsequent containment analysis.

The attached graphs were produced using MAAP, Version 2.0B. This accident analysis code was developed by IDCOR and has been reviewed by the Staff. In each sequence, emergency core cooling system recovery times were adjusted to produce total hydrogen release rates equivalent to 70-80% cladding reaction. The graphs are self explanatory, with the accident sequence for each indicated at the top, and the corresponding mass or energy release parameter at the left side. Note that discontinuities occur in the energy and mass release parameters at certain points because code predictions indicate that the release rates at those points were zero. This is especially evident because the mass release rates of liquid water and steam were computed separately.

In order for the agreed upon analysis to proceed on schedule, NRC approval of the attached MAAP analysis is needed by December 1, 1986.

Very truly yours,



Hal B. Tucker

ROS/20/sib

Attachment

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PDR ADCK 05000369
P PDR

A001
1/1

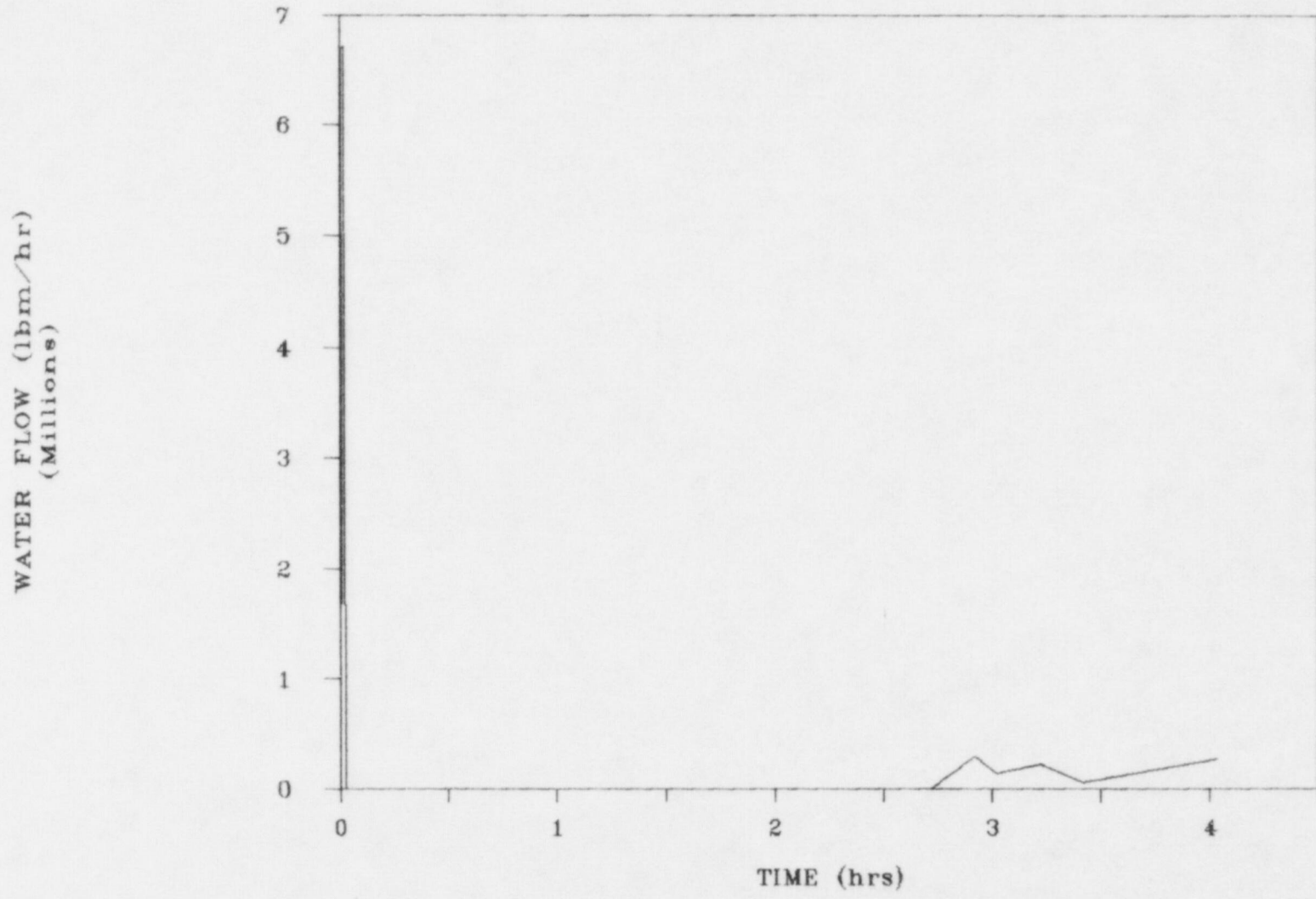
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xc: Dr. J. Nelson Grace, Regional Administrator
U. S. Nuclear Regulatory Commission
Region II
101 Marietta Street, NW, Suite 2900
Atlanta, Georgia 30323

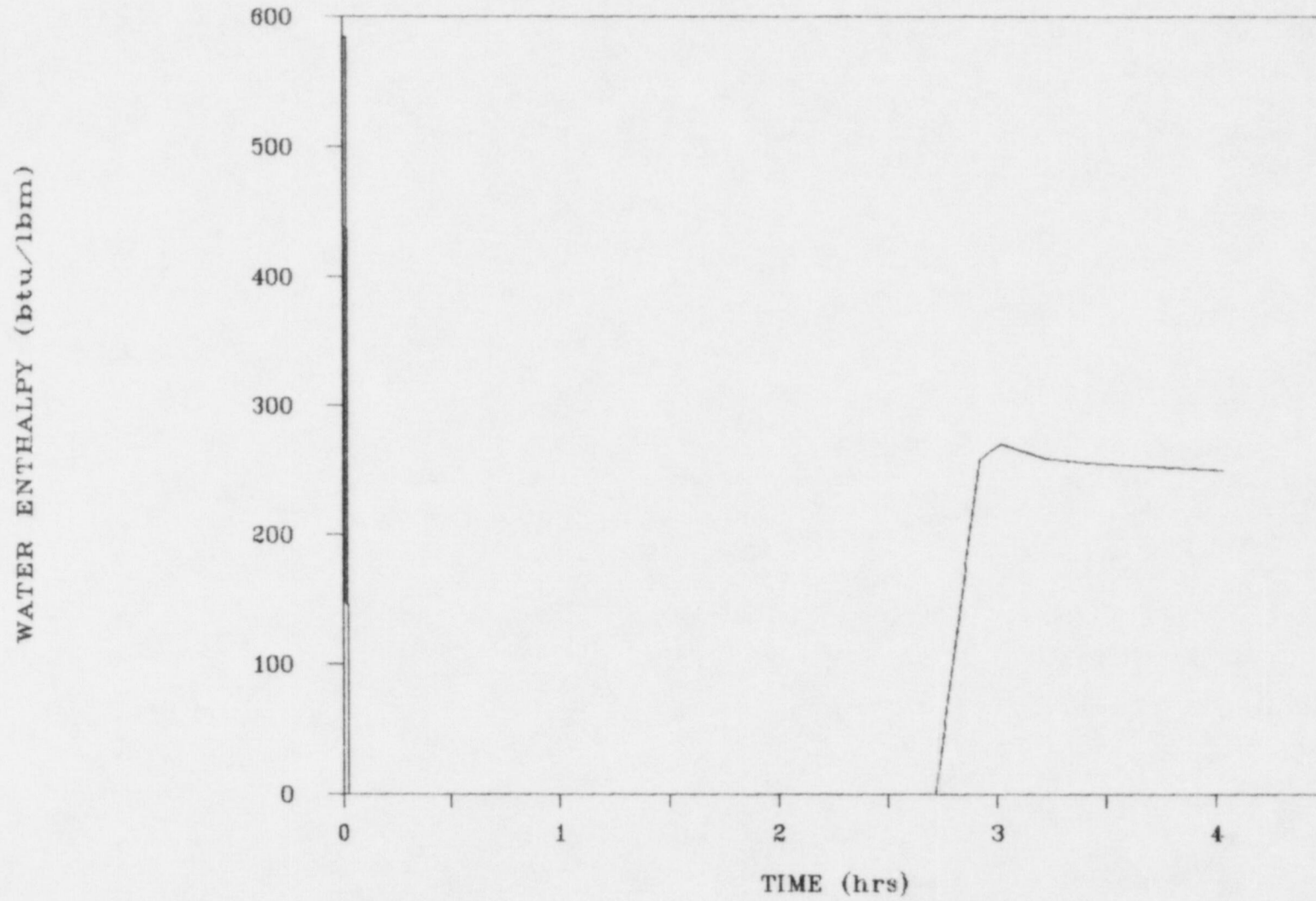
NRC Resident Inspector
Catawba Nuclear Station

Mr. W. T. Orders
NRC Resident Inspector
McGuire Nuclear Station

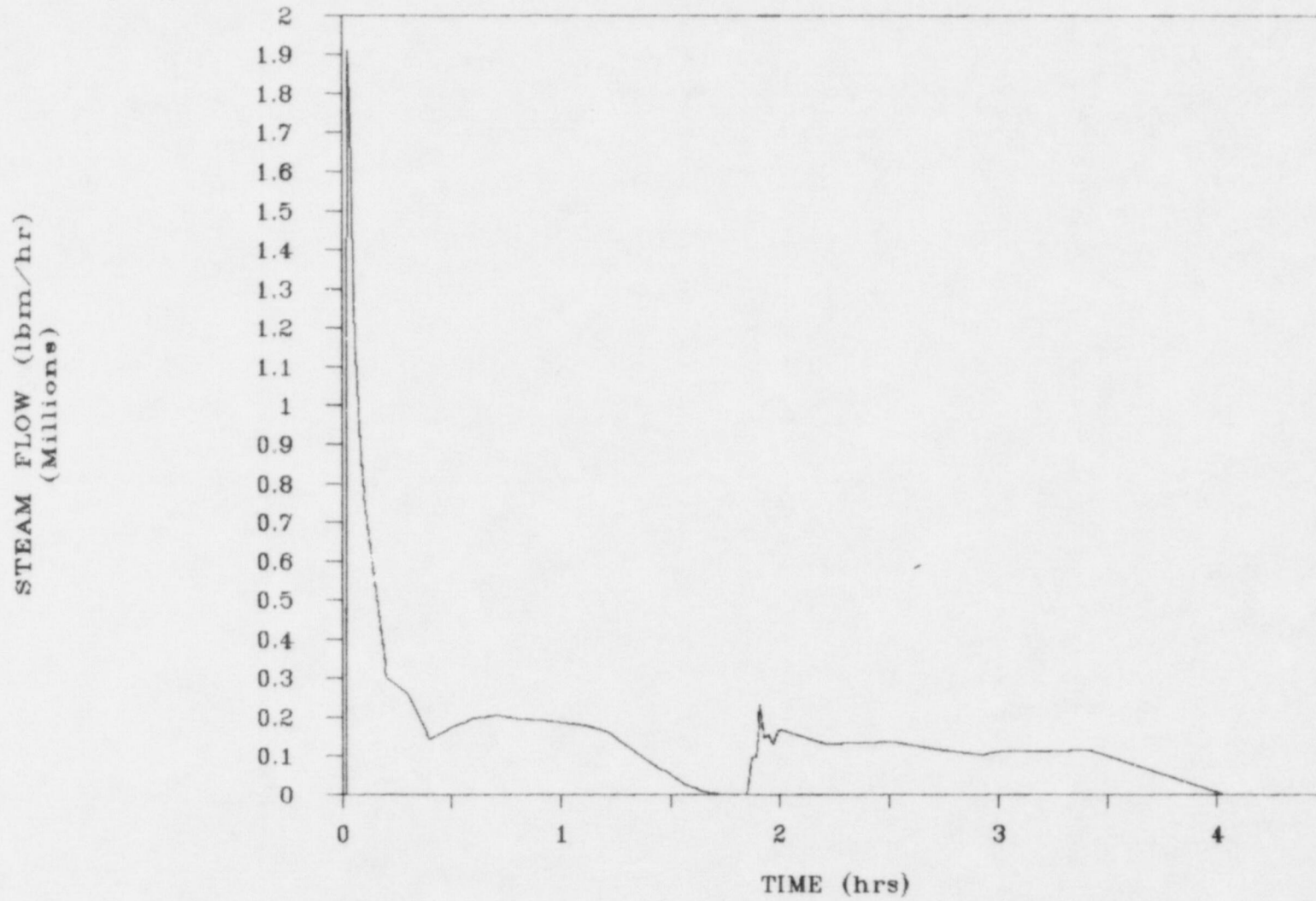
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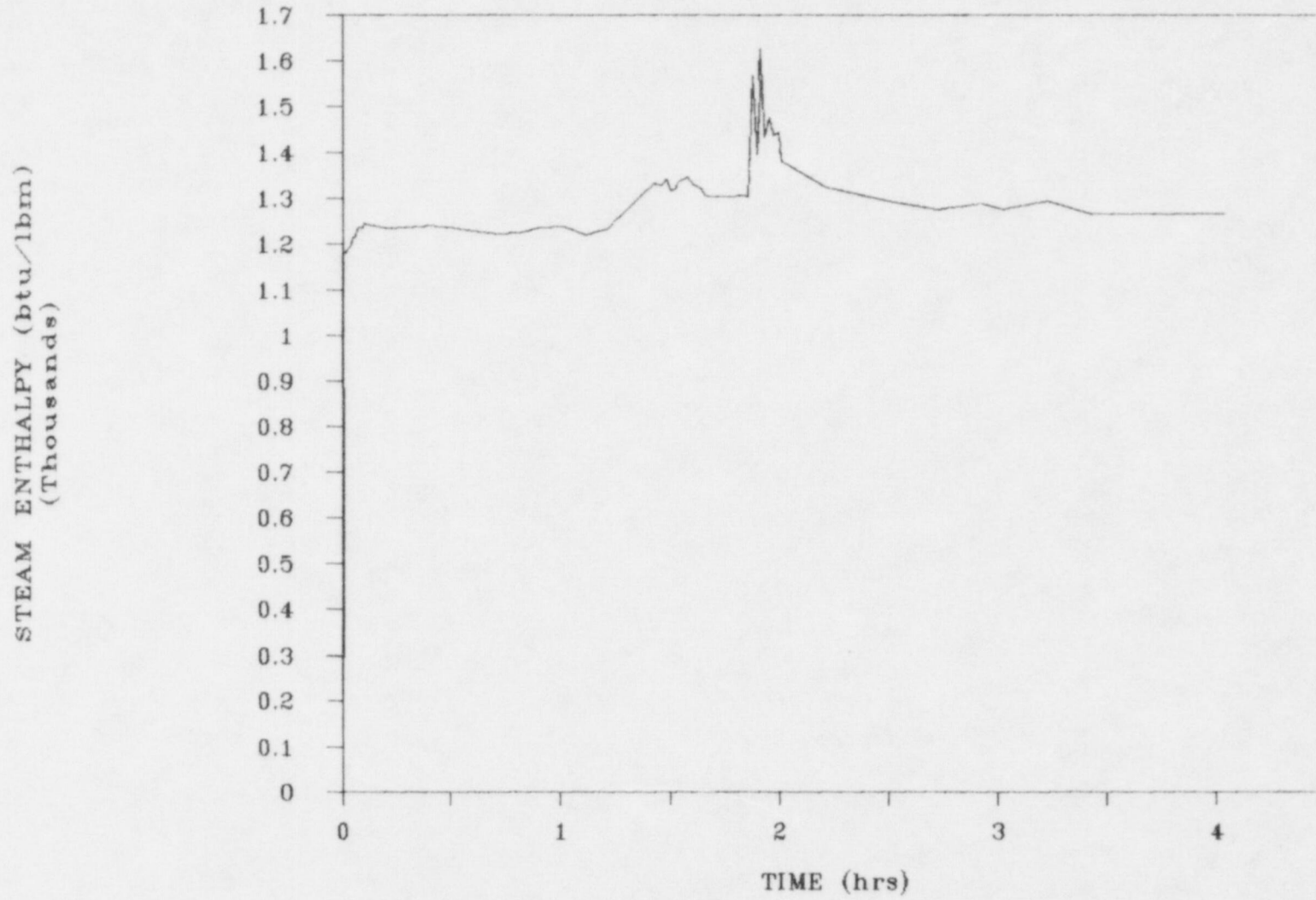
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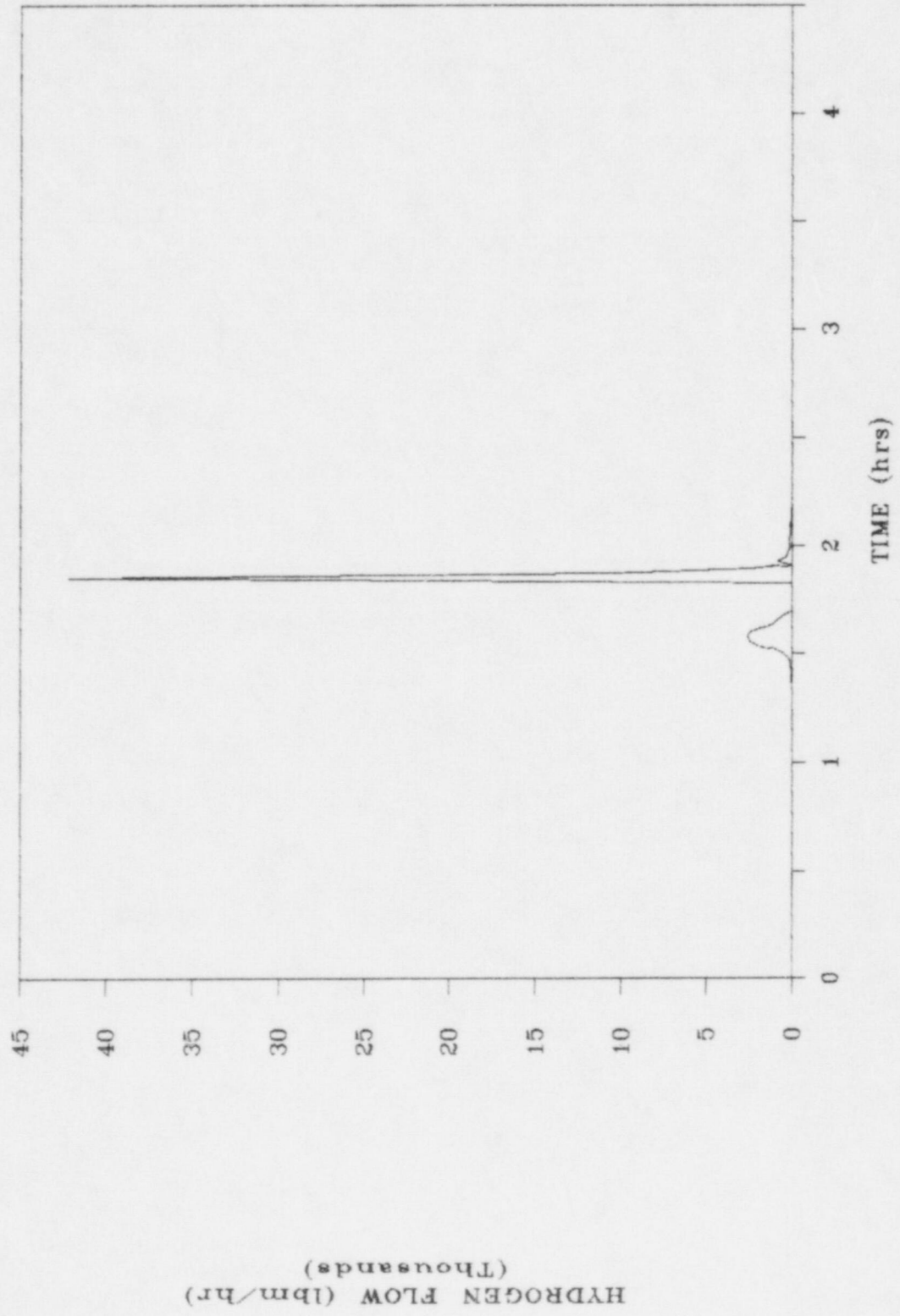
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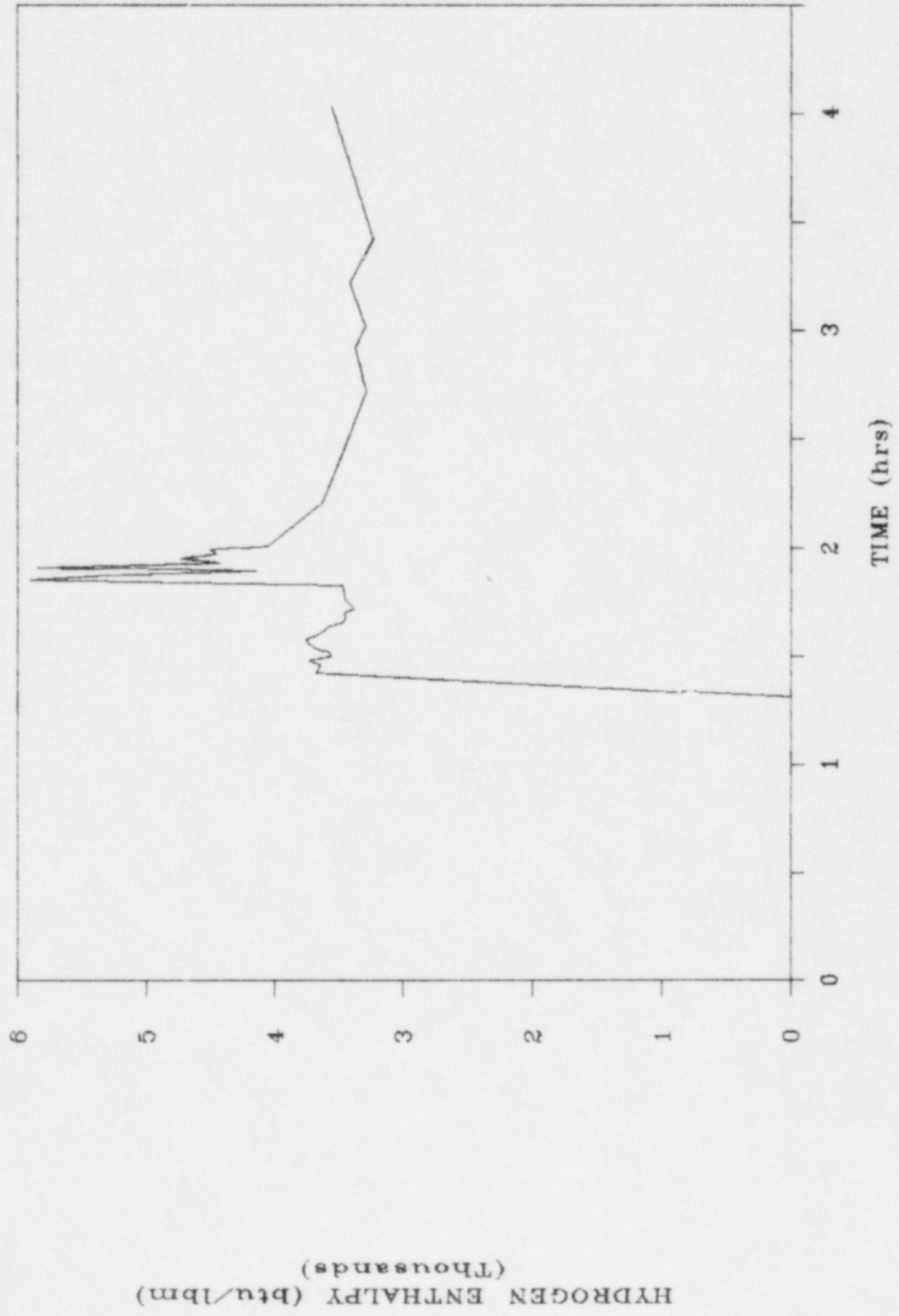
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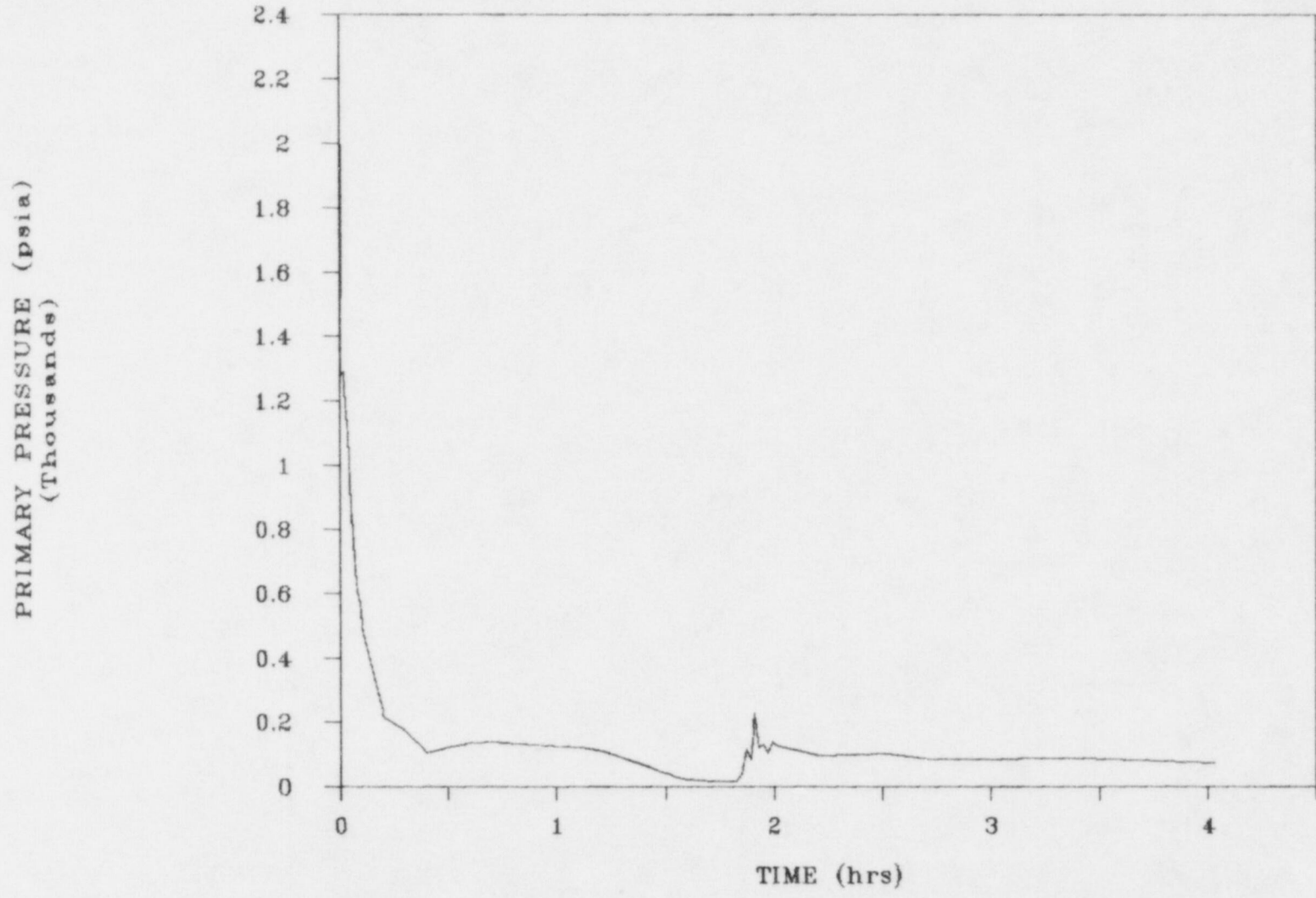
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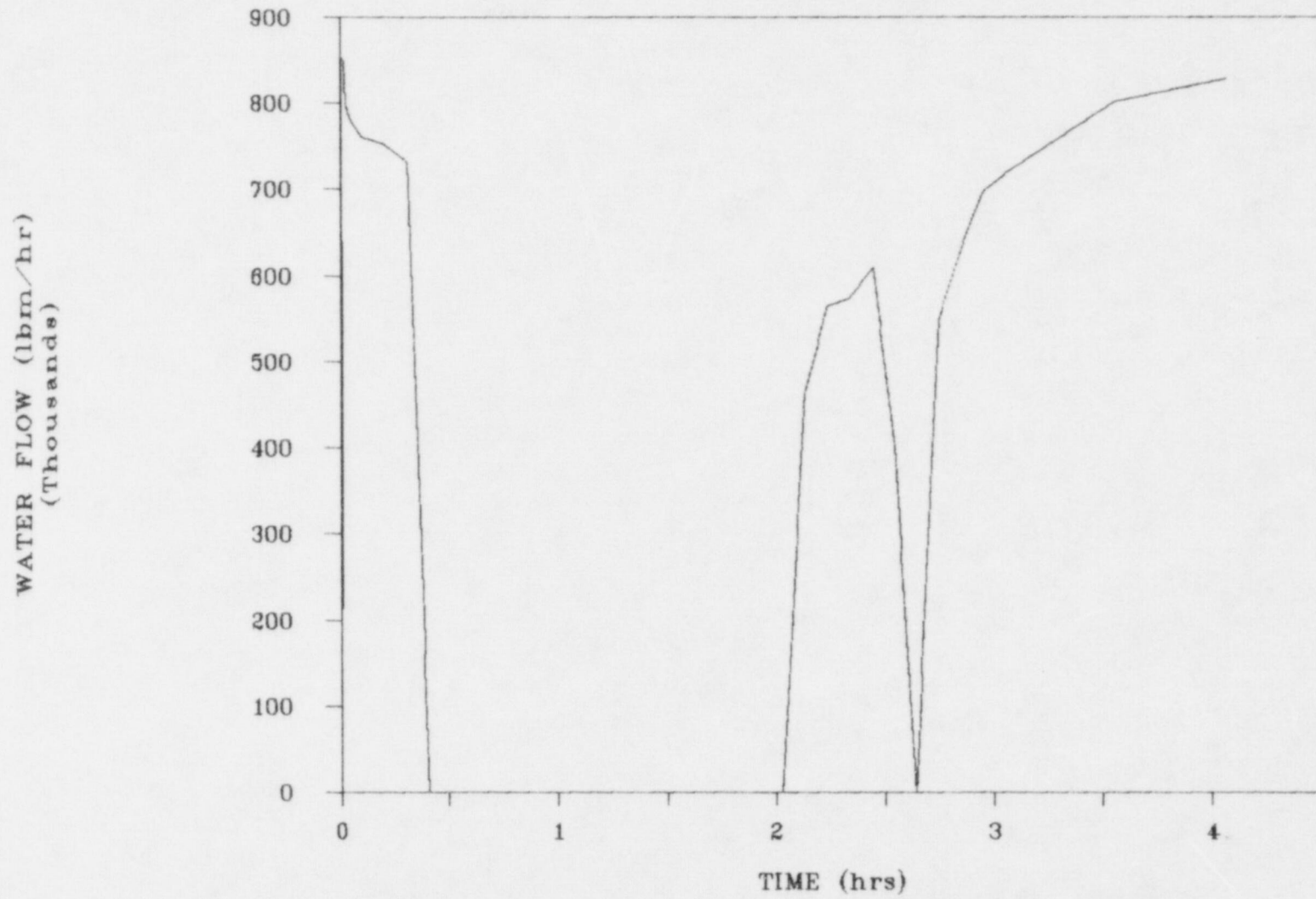
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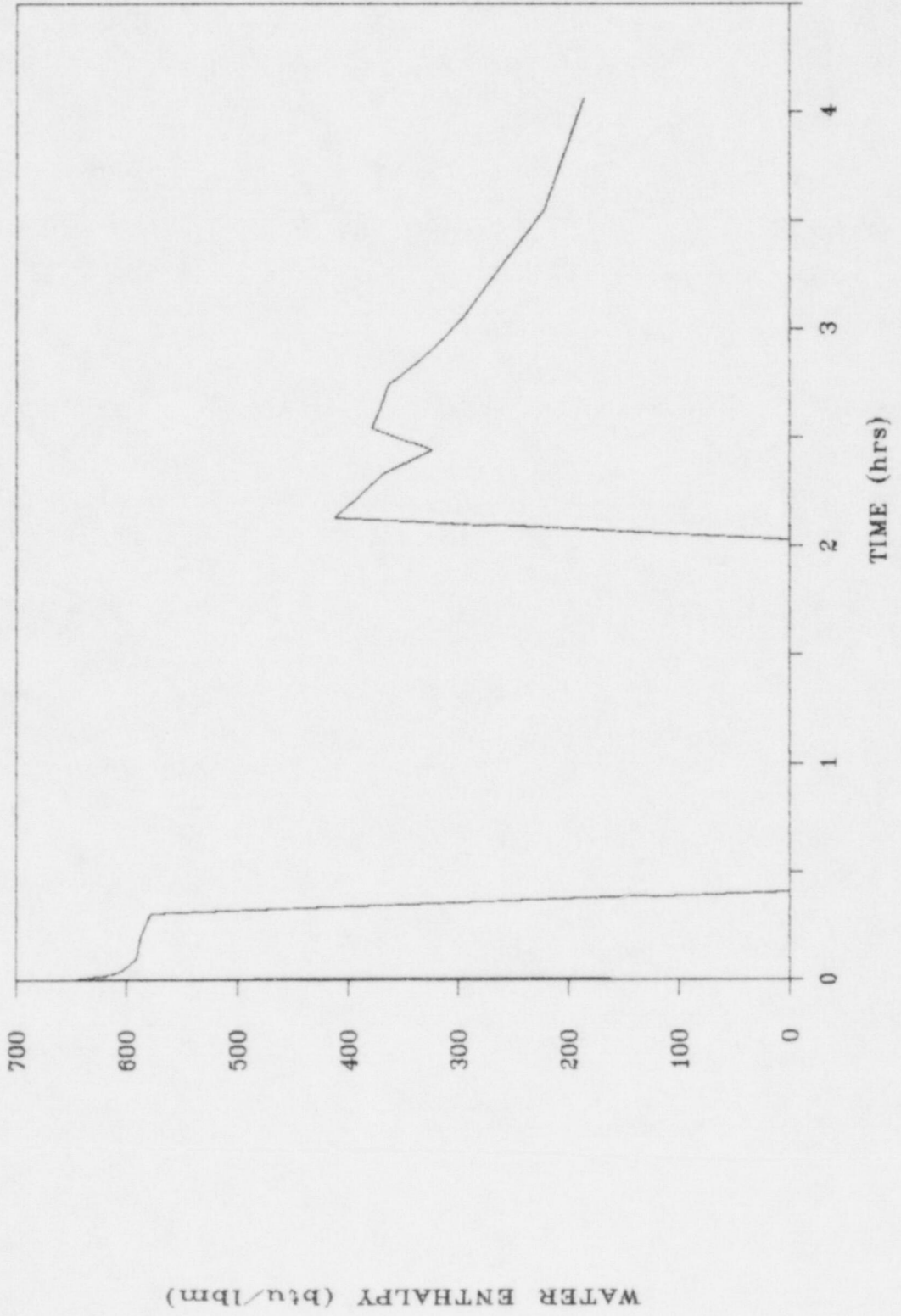
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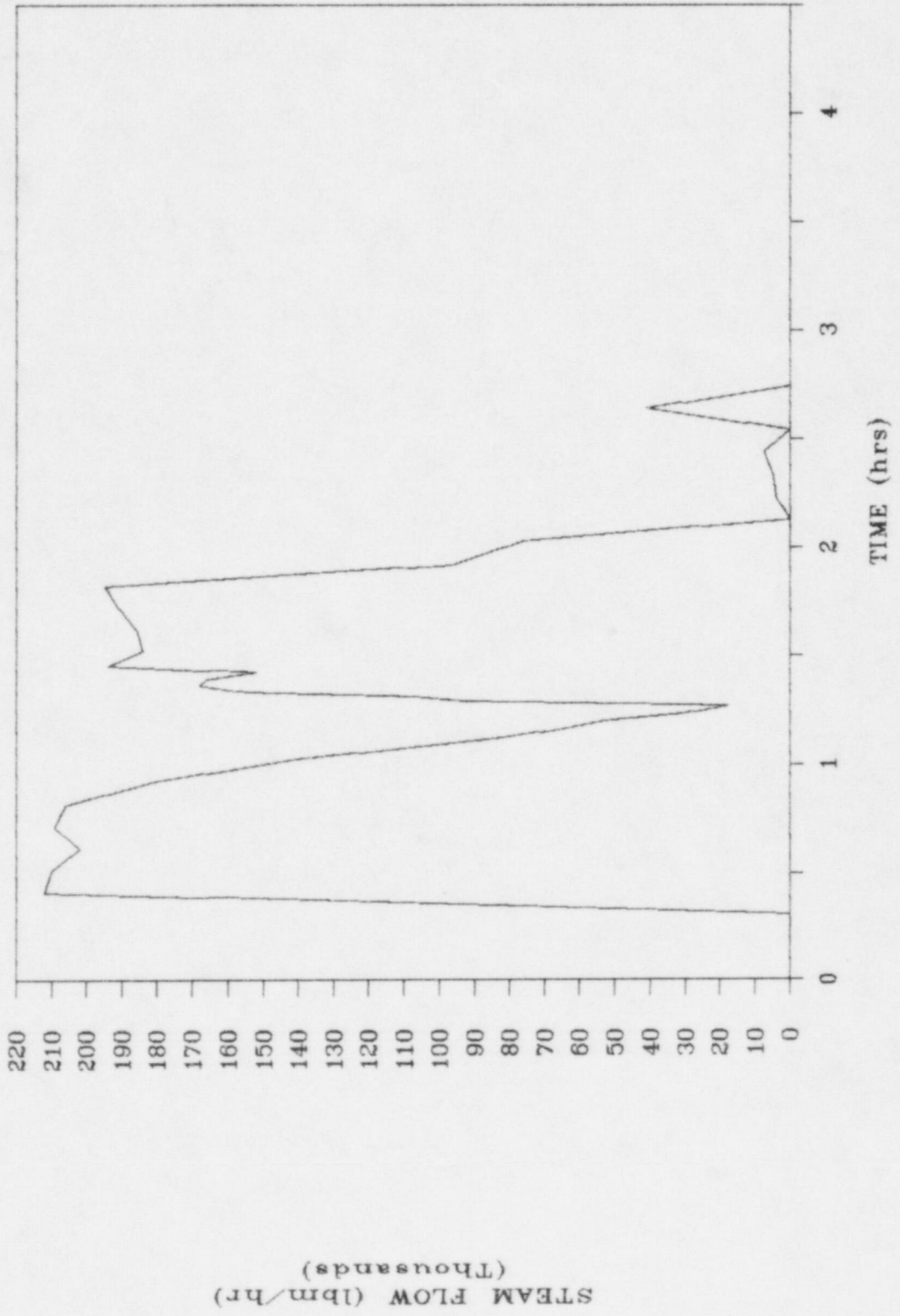
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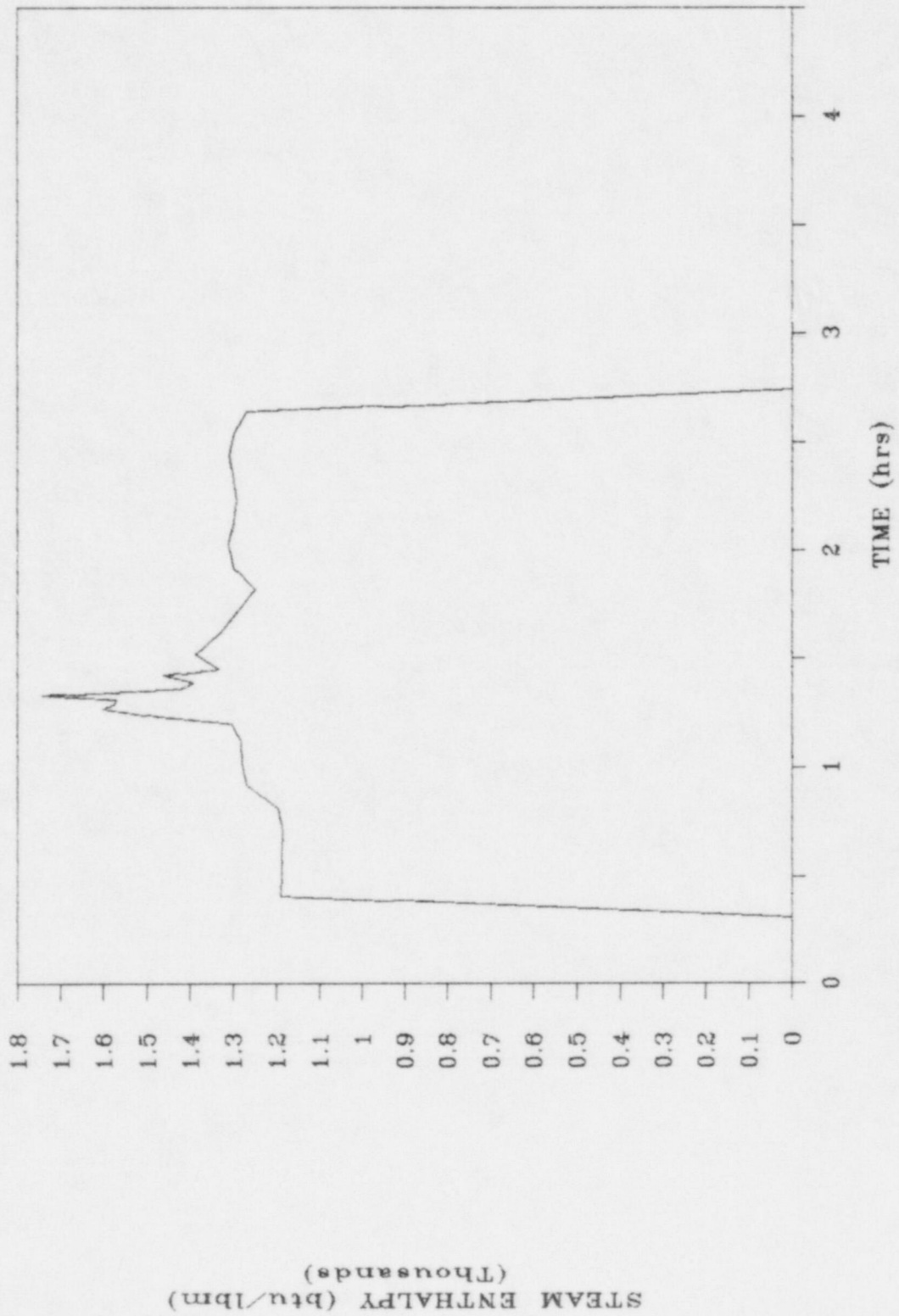
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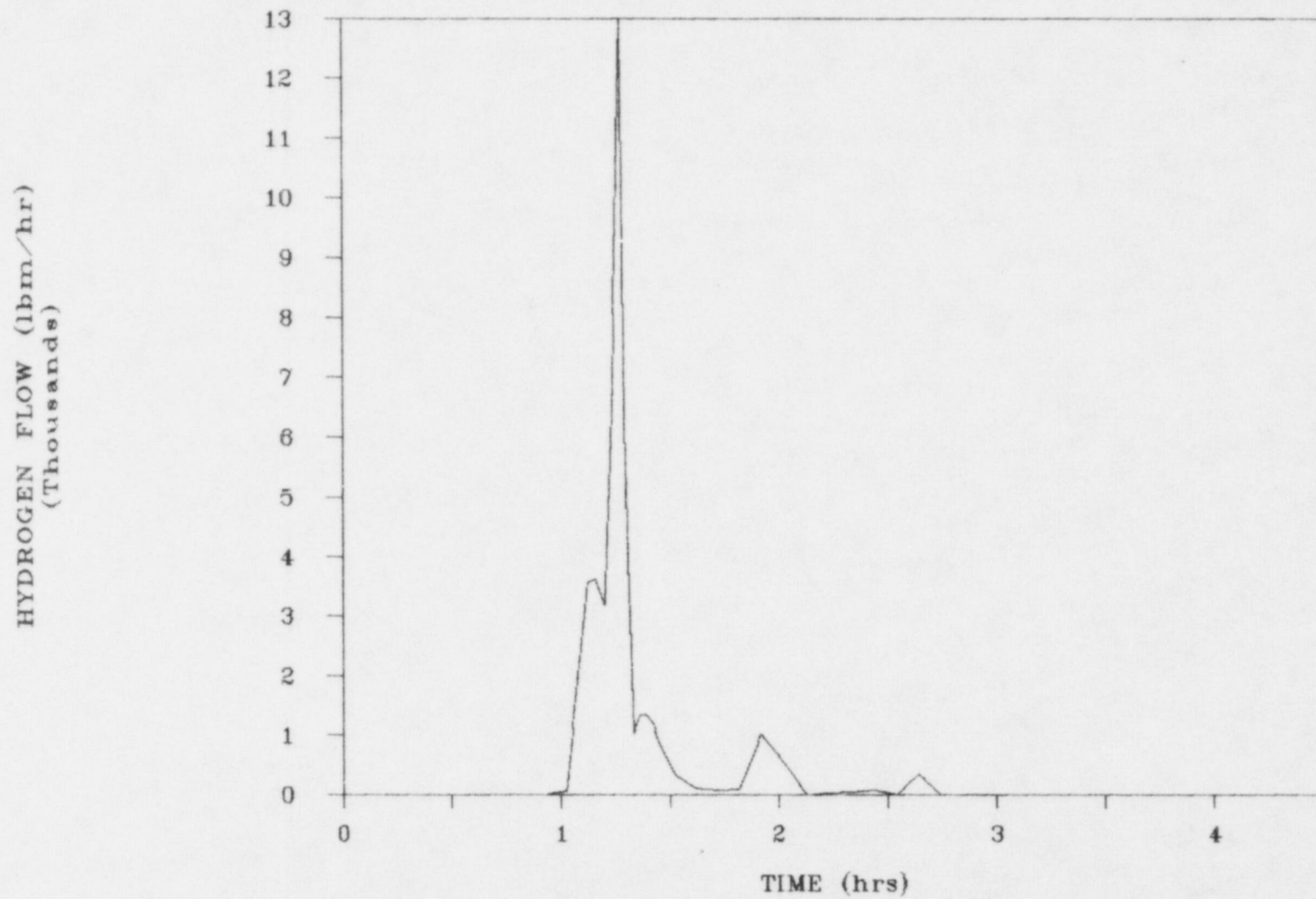
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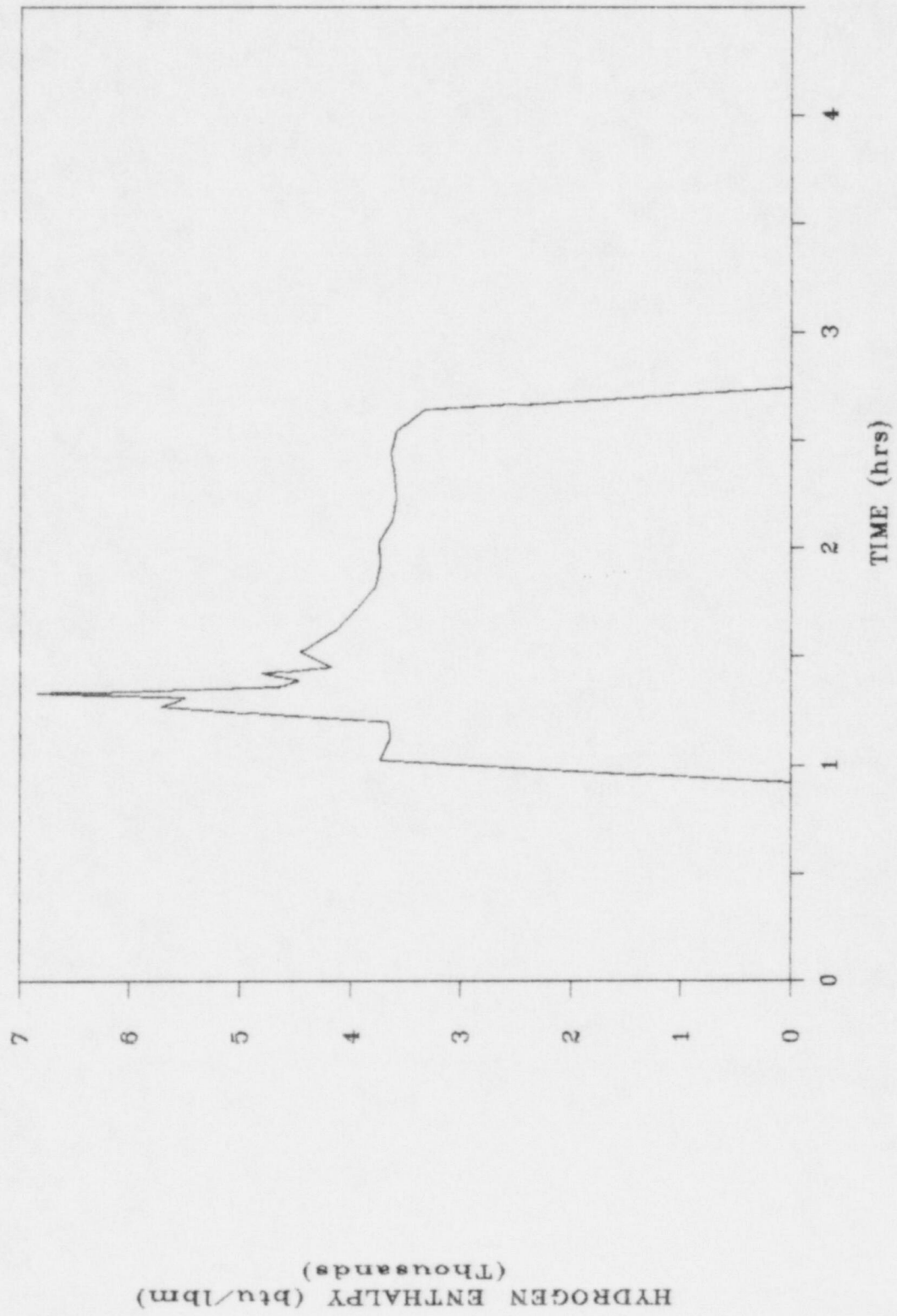
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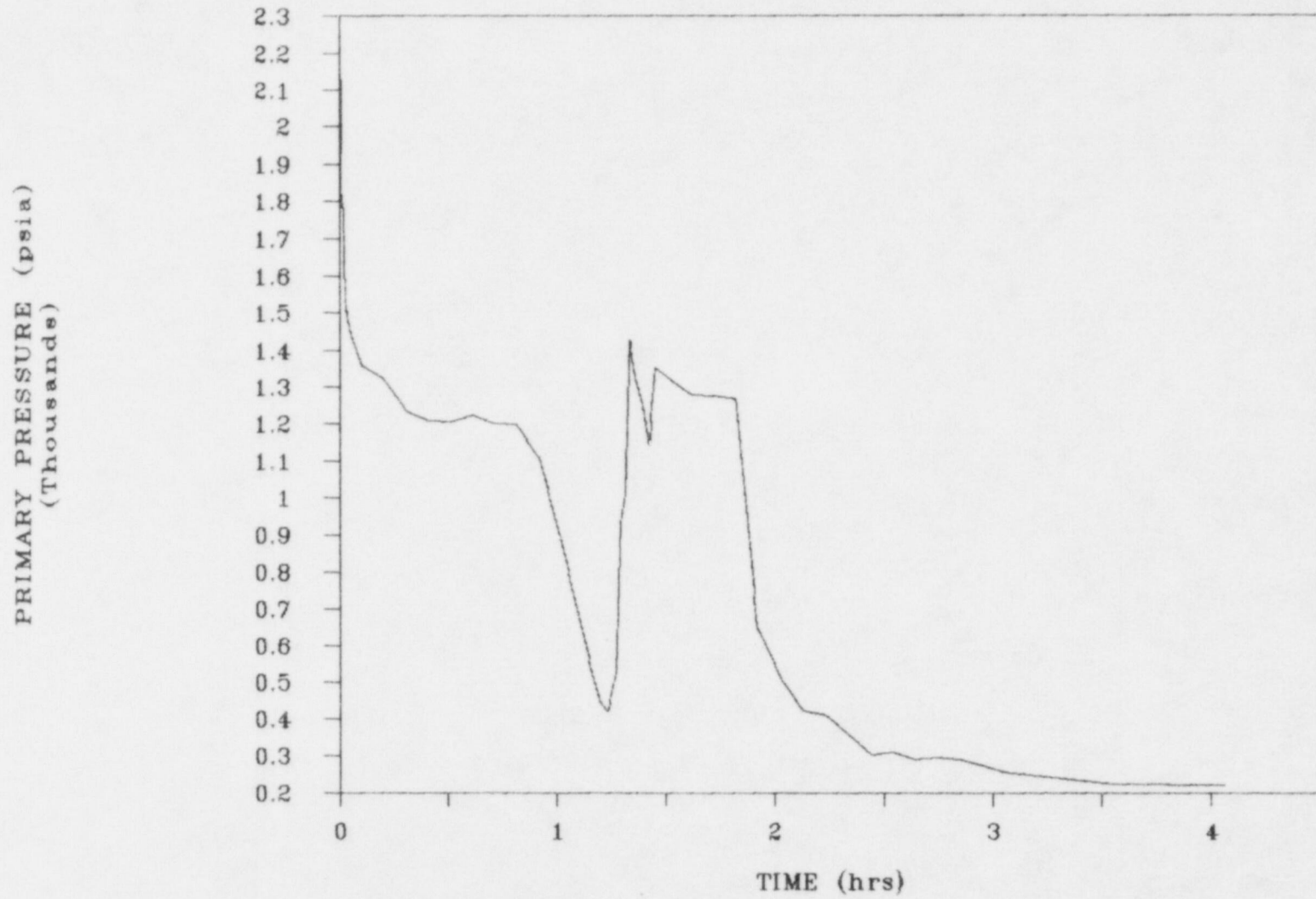
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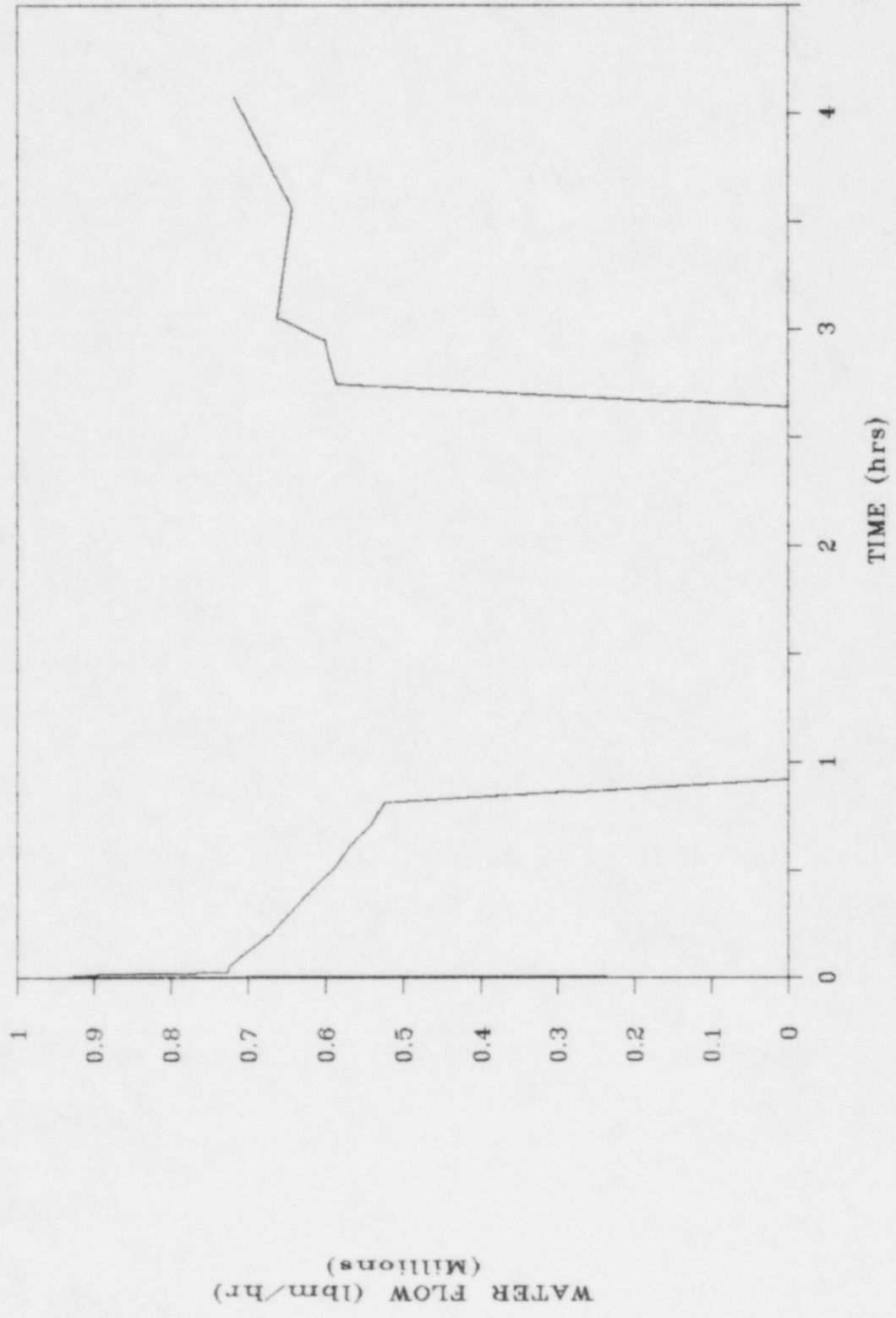
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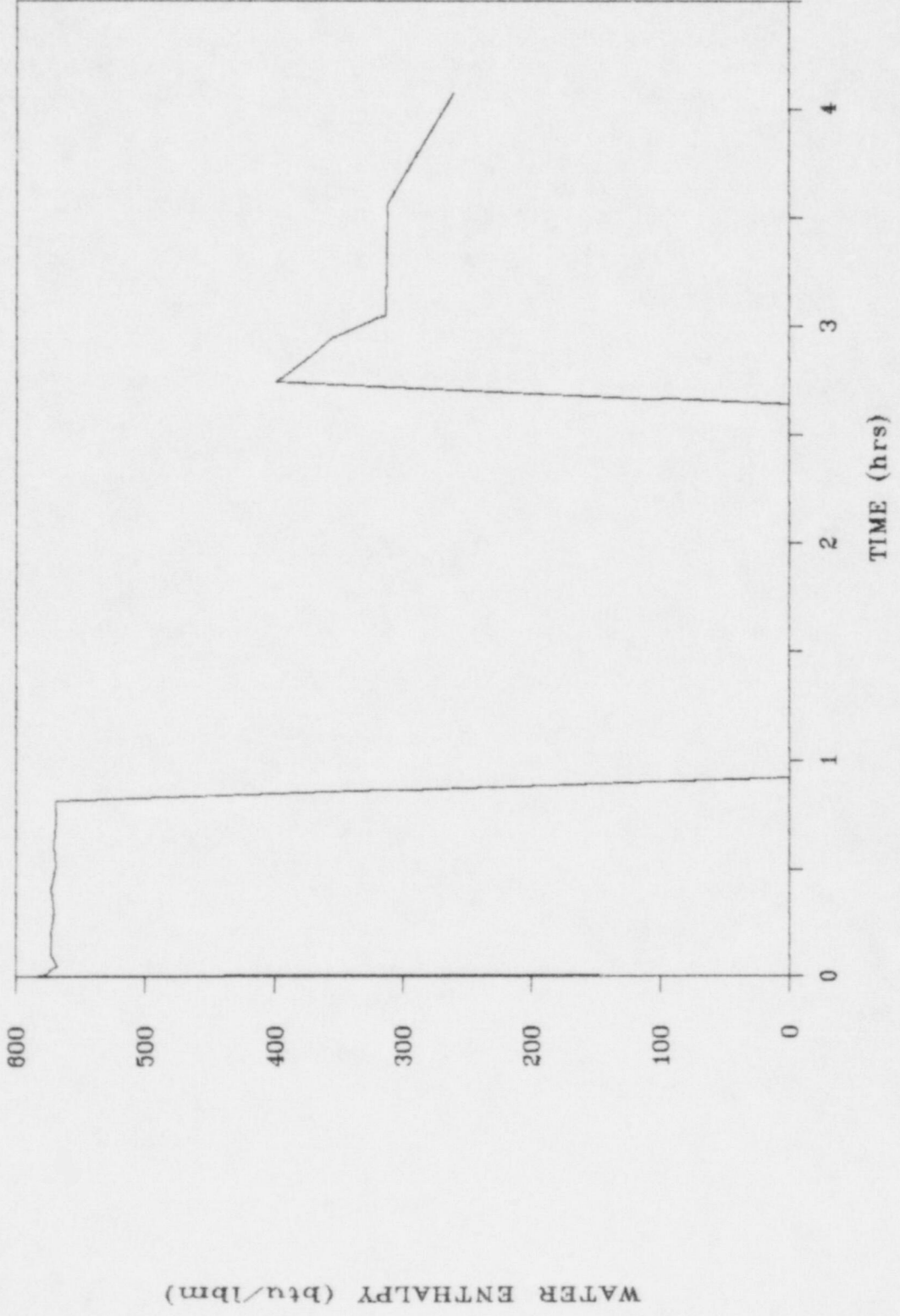
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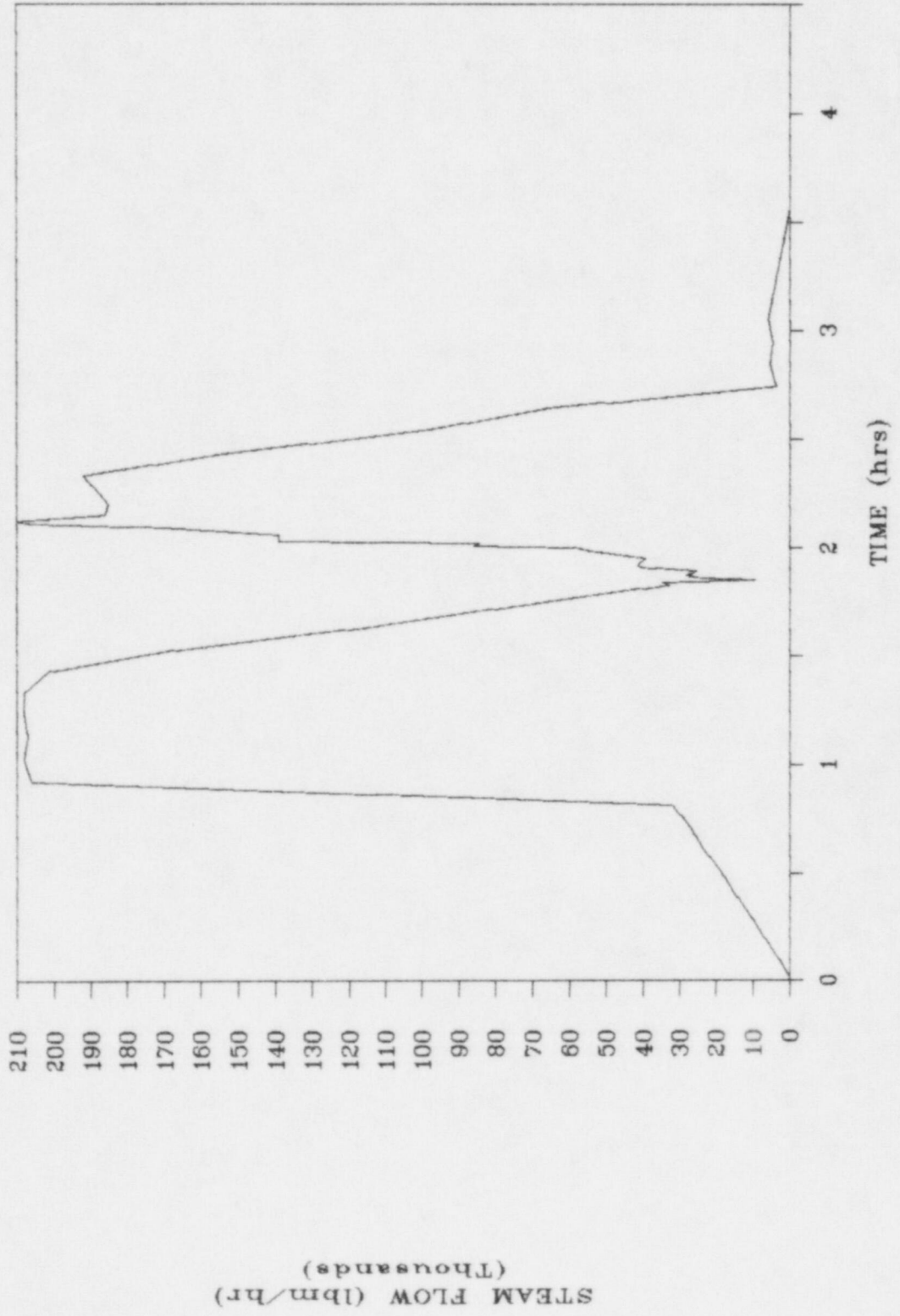
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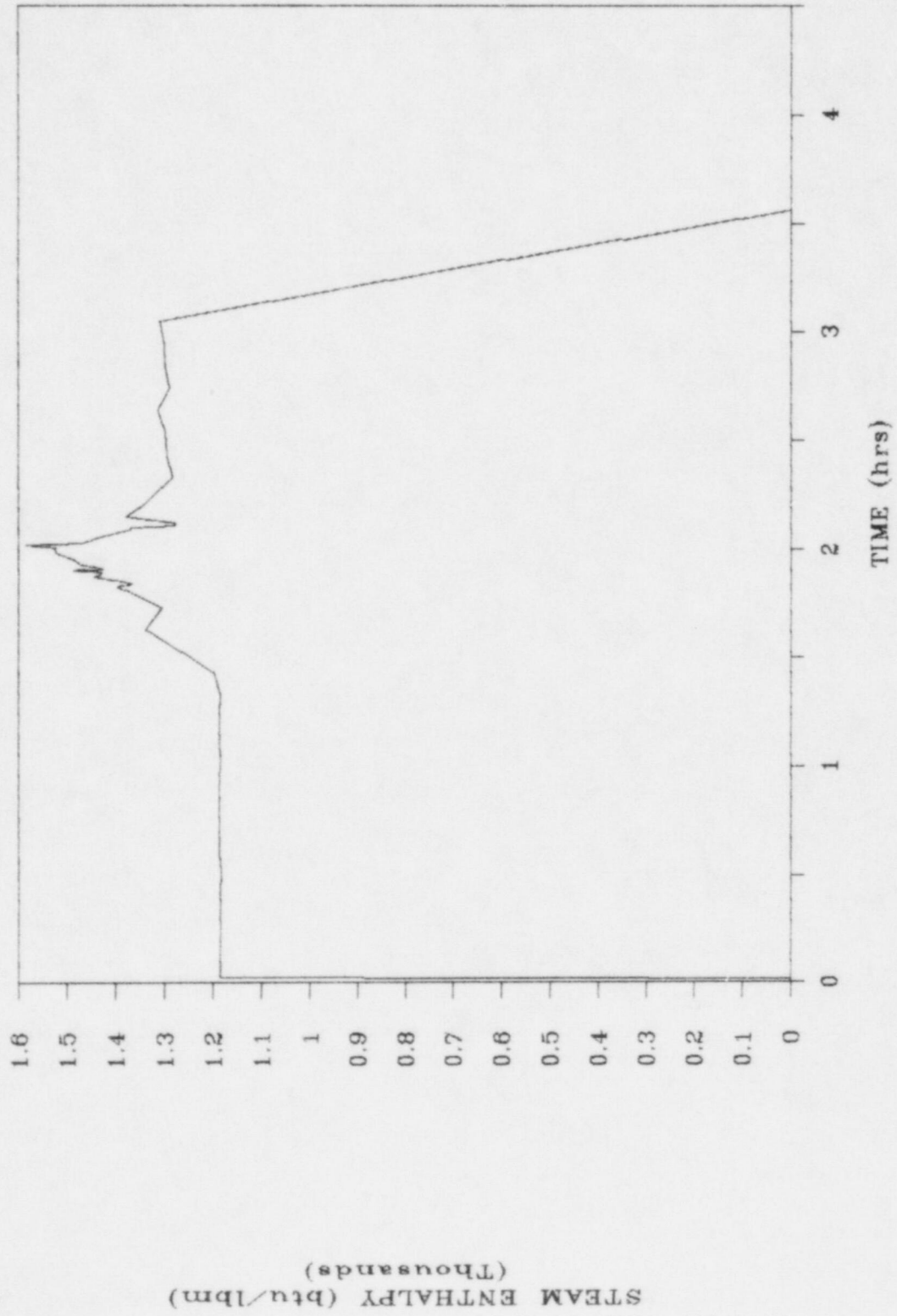
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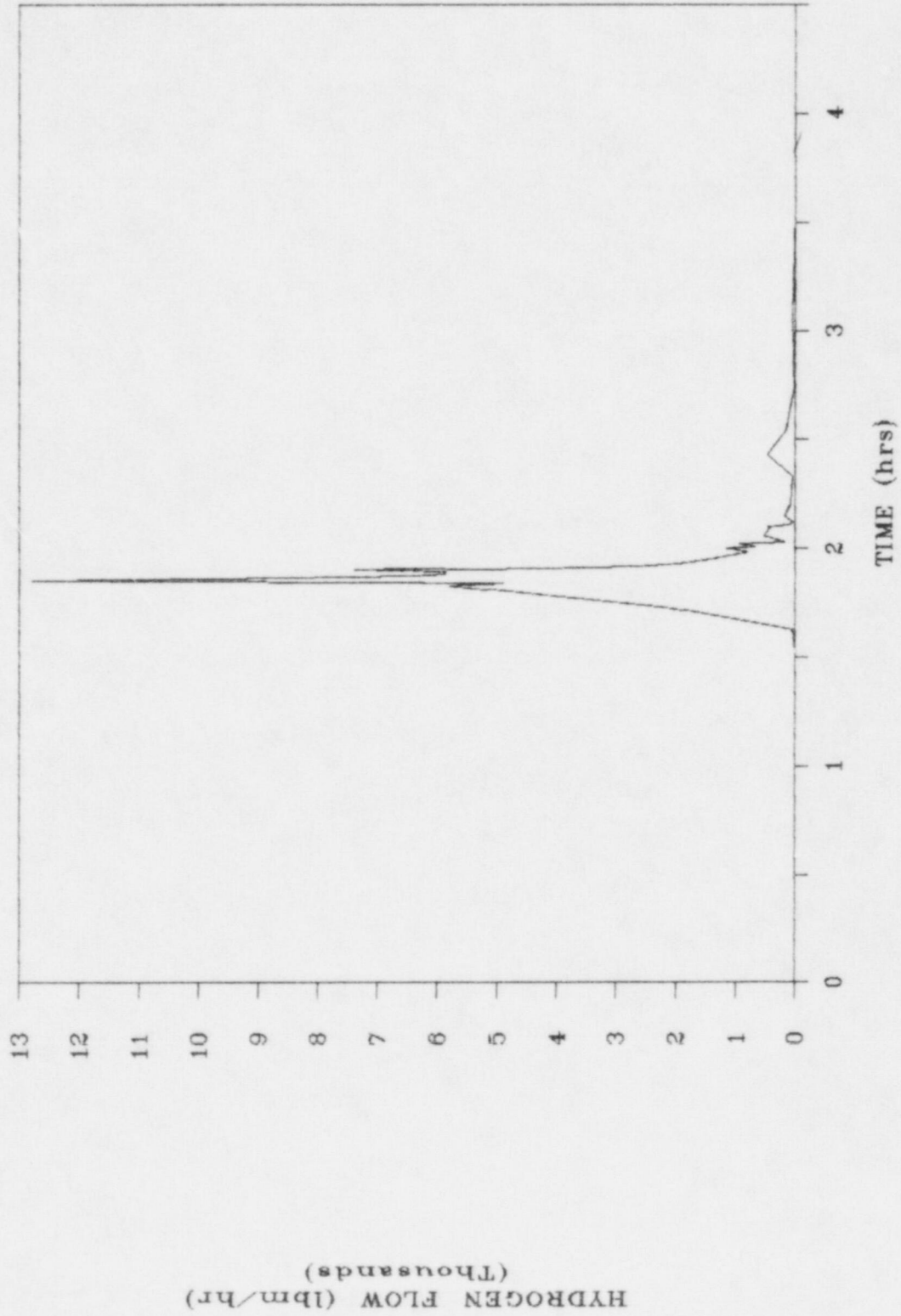
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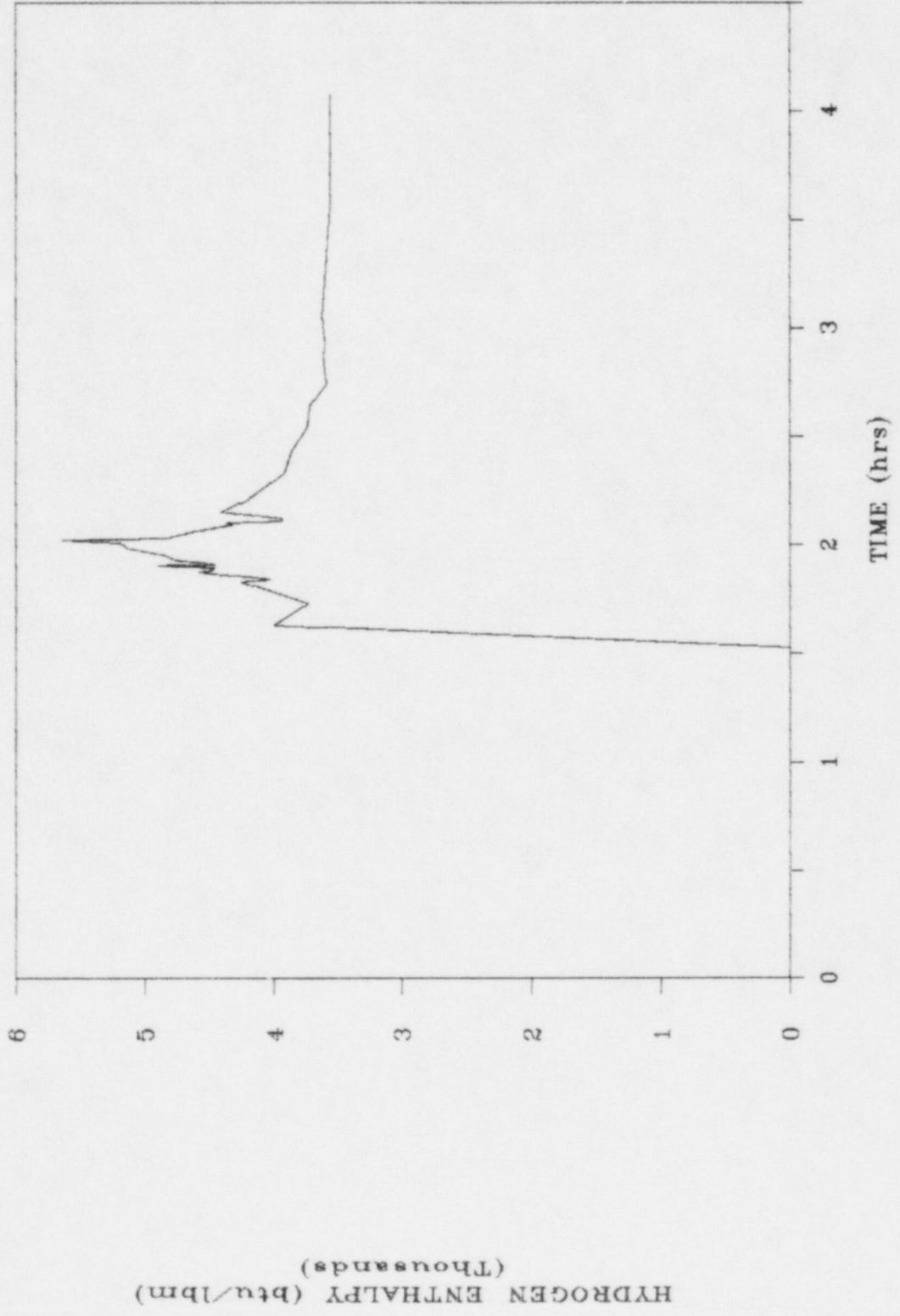
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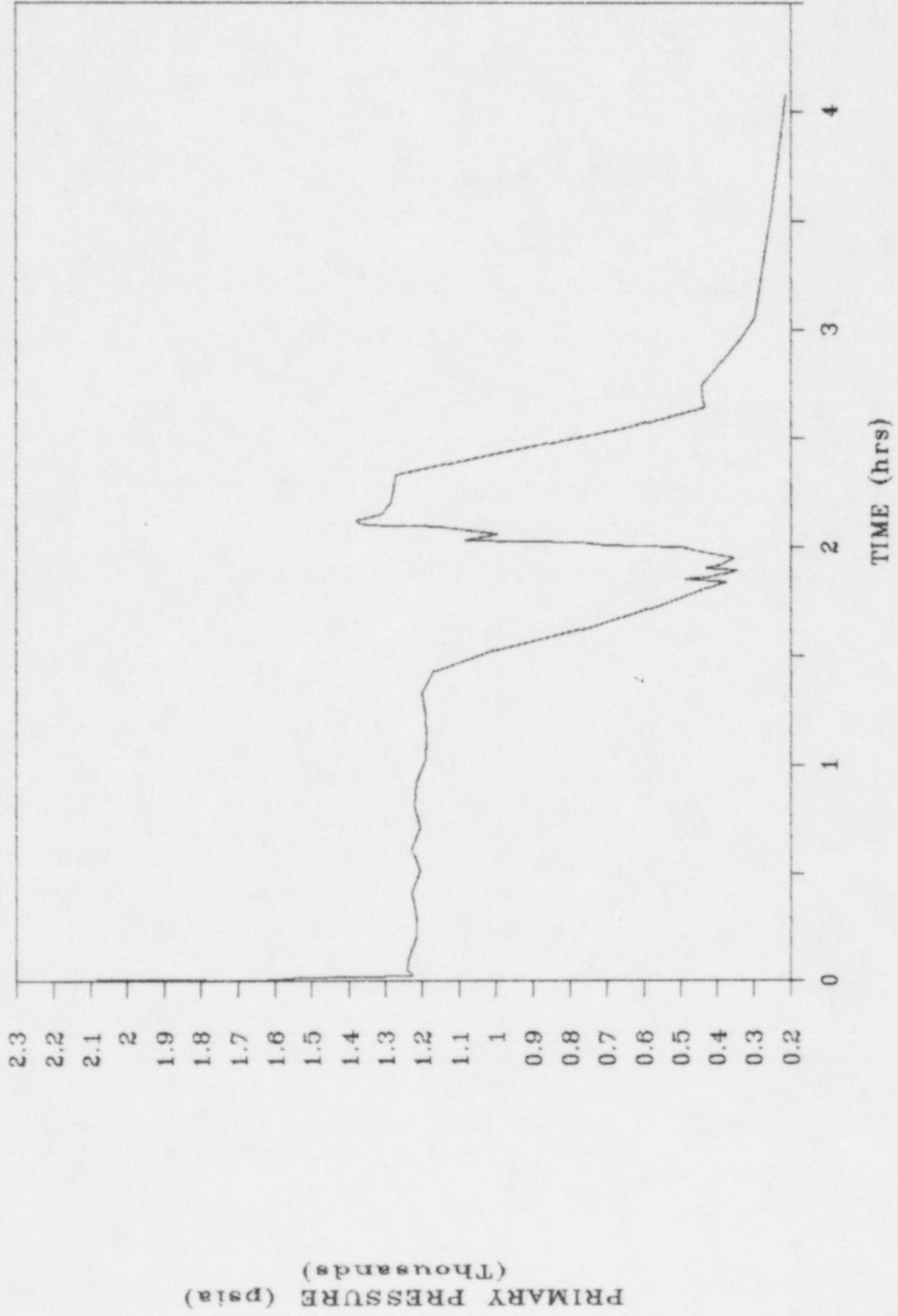
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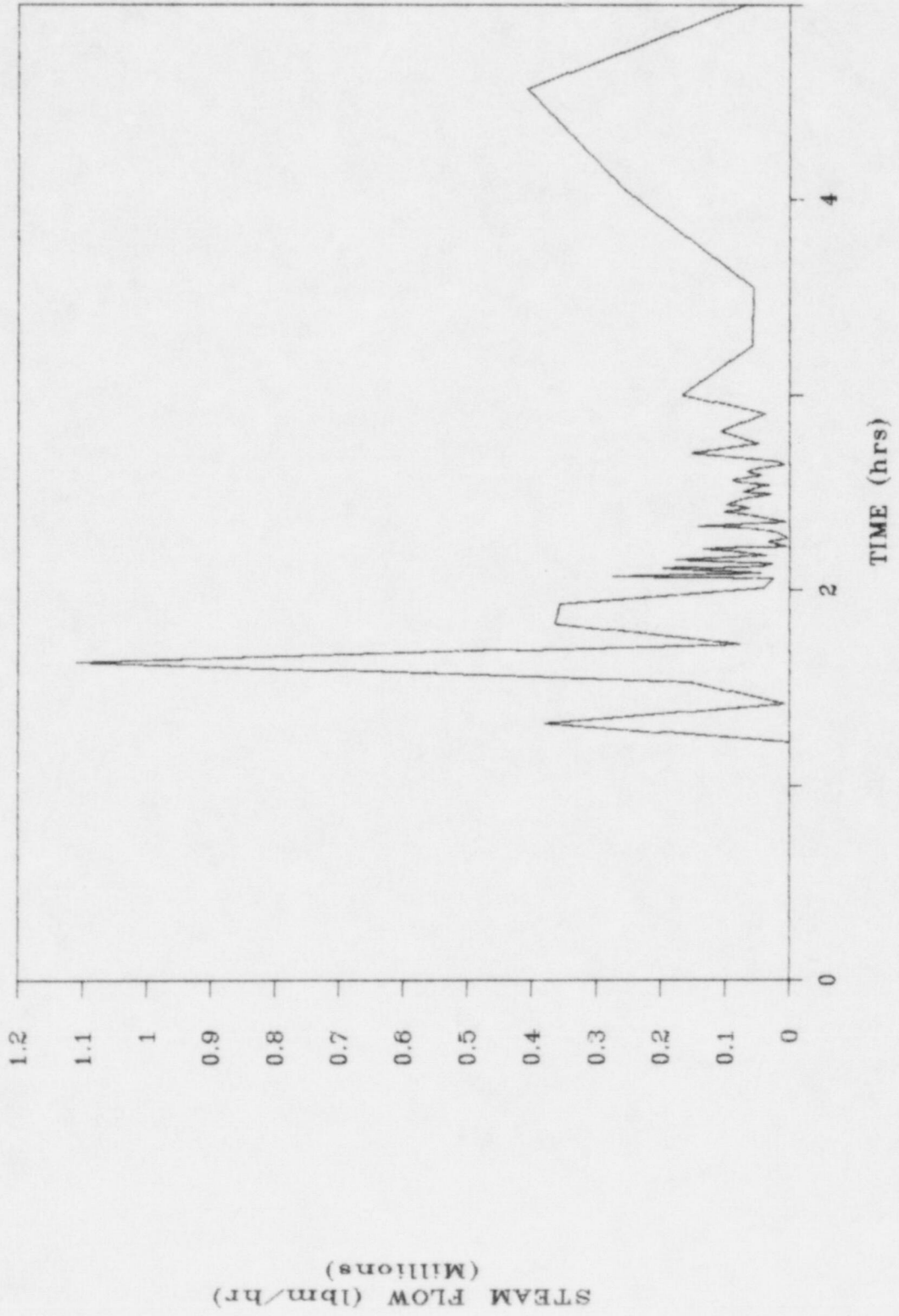
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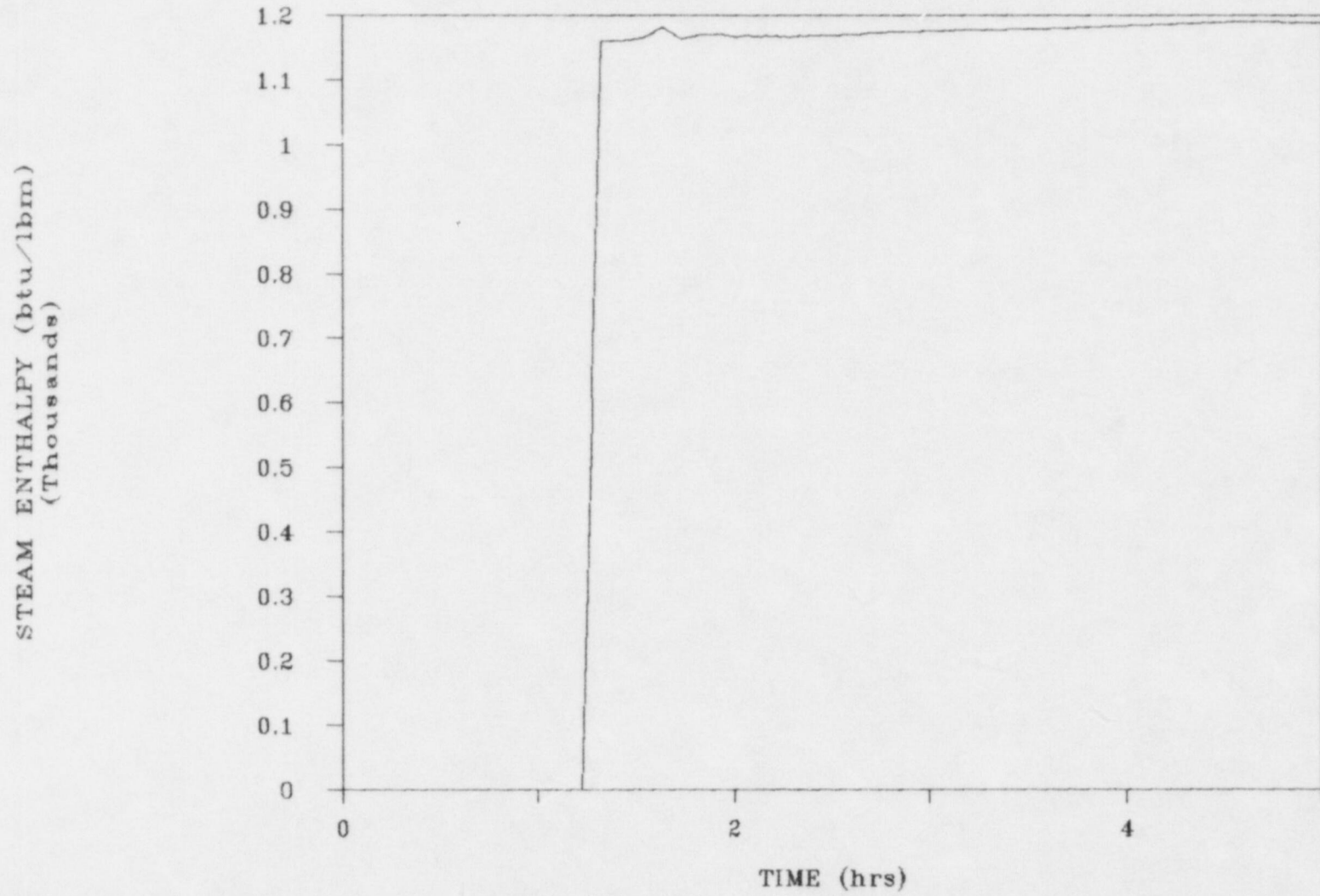
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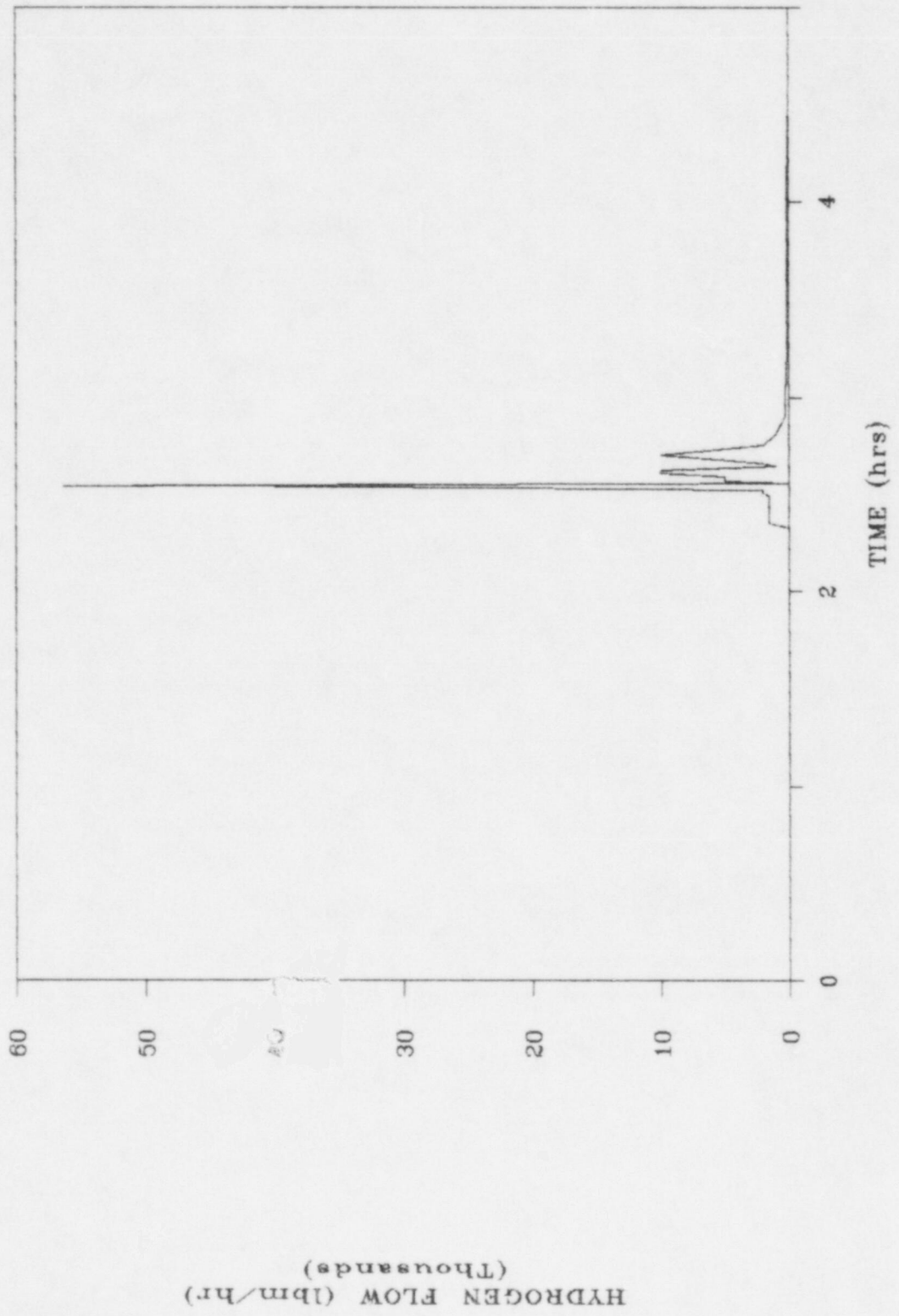
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