

## Highlights

### **This is a Title**

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- Computational Fluid Dynamics capture trend of boiler heat uptake at reduced loads.
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# This is a Title

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## ABSTRACT

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## 1. Introduction

## 2. Mathematical Model

### 2.1. Artificial neural networks

### 2.2. Mixture density networks

## 3. Case study boiler configuration

## 4. Model development

### 4.1. Hyper parameter tuning

## 5. Results and discussion


## 6. Conclusion

## CRedit authorship contribution statement

**B.T. Rawlins:** Methodology, Software, Validation, Formal analysis, Investigation, Writing original draft, Visualization.. **Ryno Laubscher:** Writing review & editing, Methodology, Resources, Conceptualization.. **Pieter Rousseau:** Writing review & editing, Resources, Conceptualization.

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