

The School of XXXXXX

# Scotland Water - XXXXX

by

XXXX XXXX, 000001

June 2020

Supervised by  
Dr ??? ???

## Own Work Declaration

Here comes your own work declaration

**Contents**

<b>1</b>	<b>Introduction</b>	<b>2</b>
<b>2</b>	<b>Background</b>	<b>3</b>
<b>3</b>	<b>Exploratory &amp; initial data analysis</b>	<b>4</b>
3.1	Models . . . . .	5
3.2	Techniques . . . . .	6
<b>4</b>	<b>Technical Stuff</b>	<b>7</b>
4.1	Important Things . . . . .	7
<b>5</b>	<b>Conclusions</b>	<b>7</b>
	<b>Appendices</b>	<b>9</b>
<b>A</b>	<b>An Appendix</b>	<b>9</b>
<b>B</b>	<b>Another Appendix</b>	<b>10</b>

## **Executive summary**

Here I will write a very good, precise and brief executive summary.

# 1 Introduction

## 2 Background

### 3 Exploratory & initial data analysis

### 3.1 Models

Models are *very* helpful because.

- They're good.
- They're helpful.



## 3.2 Techniques

Techniques even better because.

1. They're magnificent.
2. If they work.

## 4 Technical Stuff

Now it's getting very technical ... I will cite Shiina & Birge (2004) Gröwe-Kuska & Römisch (2001).

### 4.1 Important Things

Finally we should have a nice picture like this one. However, I won't forget that figures and table are environments which float around in my document. So LaTeX will place them wherever it thinks they fit well with the surrounding text. I can try to change that with a float specifier, e.g..

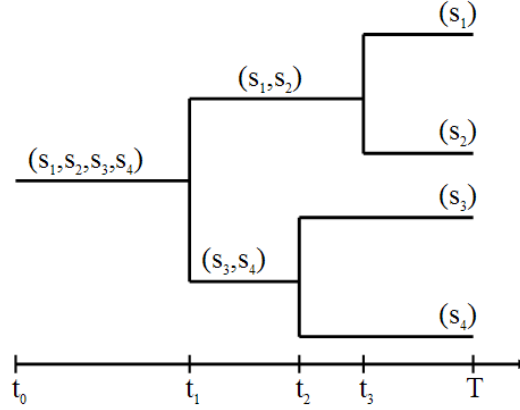


Figure 1: Look at this scenario tree with funny times  $t_1$  and scenarios  $s_1$  etc.

Now I want to use one of my own environments. I want to define something. I definitely need some good tables, so I do this. I should really refer to Table 1.

Case	Generators	Therm. Units	Lines	Peak load: [MW]	[MVar]
6 bus	3 at 3 buses	2	11	210	210
9 bus	3 at 3 buses	3	9	315	115
24 bus	33 at 11 buses	26	38	2850	580
30 bus	6 at 6 buses	5	41	189.2	107.2
39 bus	10 at 10 buses	7	46	6254.2	1387.1
57 bus	7 at 7 buses	7	80	1250.8	336.4

Table 1: Something that doesn't make sense.

## 5 Conclusions

I have no idea how to conclude, so I don't write much. But the stuff that follows is important.

## References

- Gröwe-Kuska, N. & Römisch, W. (2001), *Stochastic unit commitment in hydro-thermal power production planning*, Preprints aus dem Institut für Mathematik, Humboldt-Universität zu Berlin, Institut für Mathematik.
- Shiina, T. & Birge, J. R. (2004), ‘Stochastic unit commitment problem’, *International Transactions in Operational Research* **11**(1), 19–32.

## Appendices

### A An Appendix

Some stuff.

## **B   Another Appendix**

Some other stuff.