

CONTENTS

Chapter 1 - Introduction	9
Chapter 2 - The Origins	15
2.1. Brief history of the NDAE	15
2.2. The formation of the Direction of Heavy Water Projects	26
Chapter 3 - The feasibility study of a heavy water plant	35
3.1. Organization of the study	35
3.2. Analysis of the feasibility study	38
Chapter 4 - The accomplishment of the project	69
4.1. The contract with Sulzer Brothers Ltd, 09/28/79	74
4.2. Some details of the contract with Sulzer	82
Chapter 5 - The development of the project, 1980-1993	87
5.1. The organization	87
5.2. How the construction plan was developed	89
5.3. Some testimonies of specialists who carried out their activities in the period of construction	96
5.4. What was installed in the plant	102
Chapter 6 - The industrial heavy water plant today	105
6.1. The creation of the Neuquine Company of Engineer Services, Company of the State (ENSI S.E.), 1989	105
6.2. Inauguration and shutdown	107
6.3. Development of external services	113
6.4. Fertilizer production	114
Chapter 7 - Some final reflections	117
Appendix 1 - Heavy water properties and process description	121
Appendix 2 - Process modifications for ammonia export from a monothermal non-parasitic heavy water plant	129