



**Brandon Sodium  
Chlorate Plant  
PUB Presentation**

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# Who Are We?

- Chemtrade Electrochem is a Canadian chemical manufacturing and handling company serving customers all across North America for more than half a century. We pride ourselves on efficient low-cost operations, strategic growth, quality service and a commitment to Responsible Care® through safe, sustainable operating practices.
- The Brandon Sodium Chlorate Plant is a key operation for Chemtrade and is the largest, low cost sodium chlorate plant in North America.

# Introduction

- Been in operation for the last fifty-five years.
- Current capacity is 320,000 tpy.
- Largest single power consumer in Manitoba (223 MVA) - equivalent to 150,000 households.
- Chlorate and salt is all shipped by rail.
  - Approximately 3200 chlorate and 1600 salt cars per year by CN and CP Rail
- Plant capacity has increased from original 18,000 tpy through five distinct expansion projects.



# Introduction

- Total employee compliment of 78:
  - 27 Staff
  - 17 Maintenance
  - 34 Operations
- Unionized workforce (UNIFOR) for maintenance and operations.
- High paying jobs, annual payroll of over \$8.5M.
- Strong philosophy of growth and improvement.
- Strong safety culture and long history of Responsible Care (1994).



# Site Overview



**118 Acres with Rail access from North and the South.**

# Our Business

- Chemtrade, as well as all other Chlorate producers utilize an electrolytic process.
- Electricity accounts for approximately 72% of variable costs.
- Salt is the next most costly raw material and accounts for approximately 16% of our variable costs.
- The balance of our raw materials make up the remainder of the variable costs.

# Competitiveness

- Chlorate Competitiveness is determined by three key considerations:
  - Power price, stability and availability
  - Salt price and availability
  - Transportation to markets
- Of the three, power is the most important due to the large volumes required for electrolysis.
- In 2022, two chlorate plants were idled in Canada – a very competitive industry!
- In the past, decision making regarding investment and growth has been supported by Manitoba power pricing.

## What Helps Us

- Stable and predictable power rates that are based on true cost of service.
- Reliability of service, no interruptions or power fluctuations.
- Flexibility for alternative rate options (Time of Use, Curtailment Programs).
- Supportive customer service.



# Service Reliability

- Stable Power Supply is critical to operation.
  - A single loss of power event will cost the plant \$25K regardless of duration and another \$13K per hour that we are down in lost margin.
  - Sensitivity of equipment to electrical upsets. Equipment damage is very costly!
  - 2 second outage is as significant as an hour.
  - We support rates that ensure stability of supply.

## Importance of Power Pricing

- Annual power cost paid to Manitoba Hydro is over \$65M.
- A 2.0% price increase is a \$1,300,000 increase to our annual cost in year one.
- Annual price increase of 2.0% equates to a cumulative \$20,000,000 cost over the next 5 years.
- Has a significant impact on decision making regarding future growth.
- Highly competitive business!!

## Cost Based Rates

- Looking for cost-based rates that are fair and equitable
- GSL >100kV is currently at Revenue Cost Coverage (RCC) of 113%
- Support shift towards zone of reasonableness in short-term (95% - 105%).
- Goal should be 100% in the long term to ensure that rates are cost-based, fair and equitable, stable and predictable

## Time of Use

- Change in Billing Demand Definition provides limited time-of-use opportunities.
- Support TOU concept but the available cost savings are curtailed by the 90% off-peak ratchet.
- Savings are clawed back through the additional 1.2% increase in the demand rate proposed by Manitoba Hydro as part of the change in definition.

## Customer Service

- Response to our questions and collaborative approach to problem solving.
- Knowledgeable and experienced customer service managers.

# QUESTIONS AND DISCUSSION

