

# **Sustainable Water Integrated Management (SWIM) Regional Training Event**

**Funded by the EU European Neighbourhood and Partnership  
Instrument (ENPI) South/Environment.**

**TRAINING ON EVALUATING AND STRUCTURING PPPs  
IN THE WATER SECTOR**

**Day 3**

**Public-Private Interaction, Pre-tendering, Tendering, Award,  
Negotiations, Construction and Performance Monitoring**

*As-Samra Claims, Settlement and New Investment*

*By: M.Najjar  
m.najjar@orange.jo*

*8 -10 June 2015, Dead Sea (Jordan)*

# As-Samra Encountered Problems

The Project company faced the major problems

## 1. During Construction:

- Extra ordinary increased cost of material
- Delays in construction (Deign, planning, supply of material)
- Increased construction cost due to high Hydrogen Sulfides concentration in incoming waste! Additional facilities added
- Increased construction cost due to fuel increase and cost of labor

## 2. During O&M:

- O&M overrun (Technology failure in gas separation towers (2 months)
- Increased O&M cost due to increased waste concentration
- Unfair reflection of labor index
- Unfair reflection of electricity index
- Absence of fuel index

# Claim- Increased Cost of Commodities

Claimed percentage increase in Commodities is as follows:

Commodity	Average	Range	Risk / Responsibility
Concrete	37%	(33% - 42%)	Market/ Risk/SPC
Asphalt	25%	25%	Statutory/ MWI
Rebar	11%	11%	Market/ Risk/SPC
Fuel (Diesel)	69%	(55%-190%)	Statutory/ MWI

Labor cost increased by 50%

# As-Samra Encountered Problems

- Project company requested compensation for:

1. The delays during construction (Design, planning and supply)
2. Construction overrun mainly cost of labor and material
3. Cost of additional odor facilities

*During Construction MWI compensated SPC for direct loss for fuel and partial compensation for extra ordinary cost*

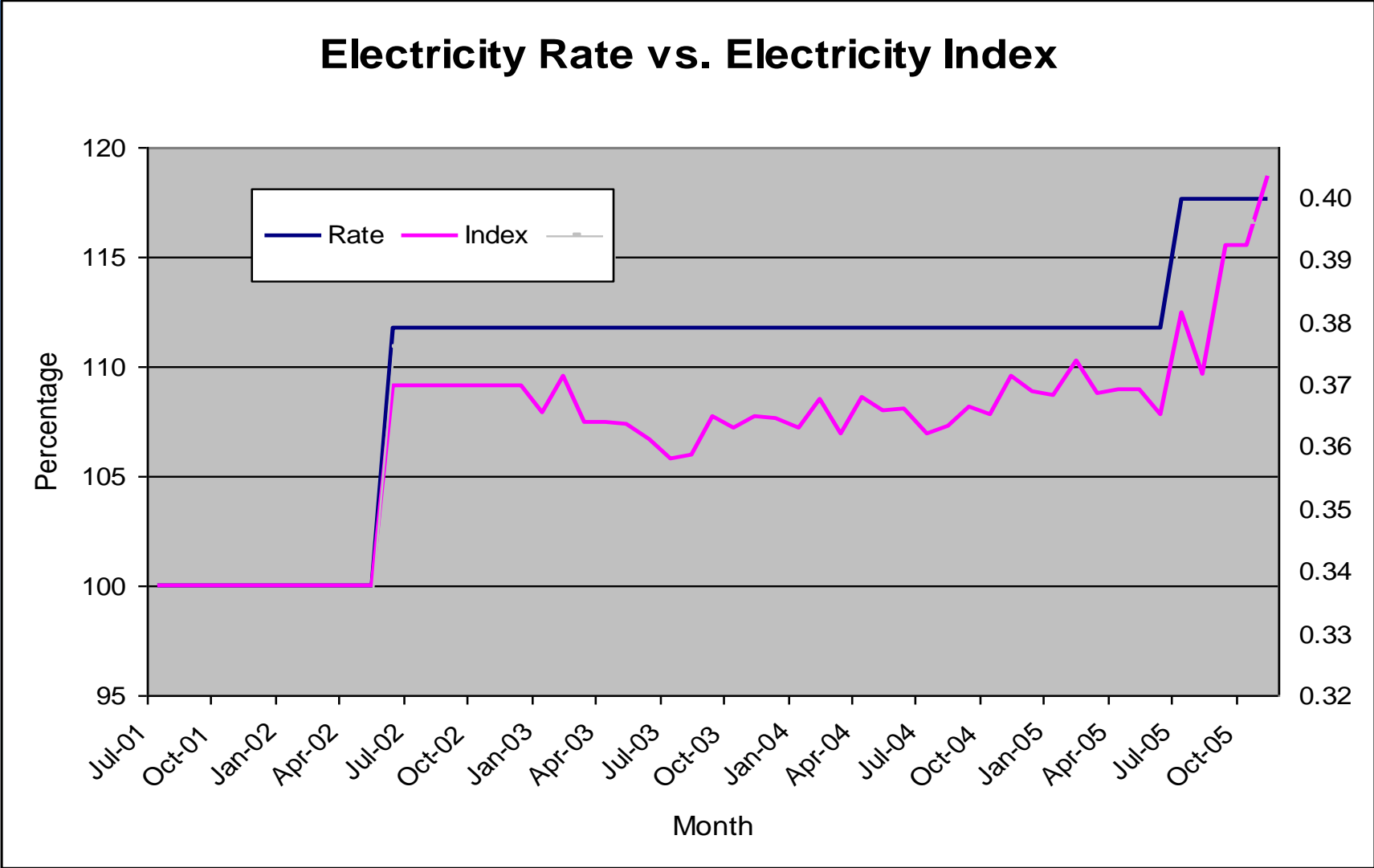
- Project company requested adjustment to O&M cost:

1. O&M overrun (Model risk) – unfair reflection of labor index, then electricity
2. Increased concentration a head of time i.e bio-load reached quickly.
3. Cost of chemicals for extra H<sub>2</sub>S concentration

Company's Losses: *extra operational cost*

*MWI adjusted local index by adding fuel index and adjusted the labor index, but capped the payments for flow and loads.*

# Claim- Electricity Index



# Claim- Unfair Indexes

1. Labor index was based on average global salaries as reported by the Social Security- The Company required changing the index to mail workers and not global because all employees are mails.
2. Fuel has not been considered in the agreement, but the electricity cut offs was adversely affected the cash-flow at the pumping stations. Fuel increased several times from 2003 until the claim time. Increase was from 115 fils per liter to almost 560 in 2009
3. The wastewater concentration was much higher than what anticipated which resulted in more sludges to be treated and handled
4. Solids concentration was not part of the payment formula



# Claim – Triggers to Settle Claims and Settlement Items

Due to O&M losses, the O&M company will go bankrupt if the situation continues.

The Project Company's IRR dropped drastically.

Lenders didn't agree to extend the time for fixing the loan and required that debt repayment starts as scheduled

Both parties agreed to settle the claims by:

1. Compensating the company for part of the extraordinary capital cost
2. Requested the company to implement additional works versus fair direct financial compensation
3. Share any benefits that may arise of carbon credit and sludge sale



# Claim – Triggers to Settle Claims and Settlement Items

4. Share any benefits that may arise of carbon credit and sludge sale
5. The Company to continue operating the pumping stations another 5 years without changing the payment formulae
6. Reducing the share of the machinery index from 40% to 30% and introducing fuel index 10%

*As-Samra New Investment*

*Changes and Payments*

# New Investment

1. The private party shall conduct yearly audit of the works/services followed with detailed report to the owner based on which the owner may decide to increase the capacity, expand services or otherwise make modifications (New Investment).
2. The private party shall not be obliged to implement any New Investment unless both parties agree on the carrying out of the new Investment and the adjustments (if any) to be made to the charges, payments or other compensation to the private party, and on the adjustments (if any) to the Contact Period.
3. The private party and the owner shall take reasonable steps to agree on the im-plementation of New Investments, including having an independent third party carrying out a technical and financial feasibility study.

## New Investment/General Rules

4. If both parties do not agree carrying out new investment, then the owner may engage third party to implement the new investment without affecting the works of the private partner, otherwise;
5. If no agreement is reached, owner shall have the right to terminate the agreement.
6. Neither the new investment nor the termination shall take place unless it is technically and financially feasible based on study performed by third party.

# The Expanded Plant/ Restated Contract

On July 2012, a new contract was signed to expand As-Samra Plant. The new contract was an amendment to the original agreement where:

- 1- Plant water line capacity was increased by 38%
- 2- Plant solids line capacity increased by 90%
- 3- plant's new investment cost is \$185million

Major changes to the agreement:

1. Plant Expansion
2. Sludge ownership and ultimate disposal became the responsibility of MWI
3. Complete refinancing under new terms
4. Increased treatment charges

# The Expanded Plant/ Restated Contract Financial Comparison

In First Agreement the Index  $I_L$  was revised as follows :

$$I_L = (50\% \times A_{Lm}/A_0) + (30\% \times B_{Lm}/B_0) + (10\% \times C_{Lm}/C_0) + (10\% \times D_{Lm}/D_0)$$

A- Labour Index

B- Producer price index

C- Electricity Index

D- Fuel Index

1. In the Restated Agreement this index remained unchanged for the Fixed Portion of the Charges BUT was revised for the Variable as follows:

$$I_{Lv} = (10\% \times A_{Lm}/A_0) + (10\% \times B_{Lm}/B_0) + (45\% \times C_{Lm}/C_0) + (35\% \times D_{Lm}/D_0)$$

# The Expanded Plant/ Restated Contract Financial Comparison

More load was introduced on electricity and fuel because of the reduced electricity self sufficiency percentage from 90% to 78%

Another index (  $I_{ls}$  ) was introduced related to sludge dewatering and transportation which depend on sludge dryness

Averaged debt service was increased from 0.5 millions to 1 million per month

Performance guarantee was increased from an average of 4.2 millions to 8.5 millions

More requirements for electromechanical equipment handing over

# The Expanded Plant/ Restated Contract Financial Comparison

Increase in insurance policies (almost doubled)

Around 40% increase on treatment charges in normal cases

MWI increased reserve account by doubling the amount. But the doubled amount was in form of bank guarantee





# Treatment Charges/Real Comparison

