



# Ministry of Petroleum and Natural Resources

## LNG Regasification Terminal

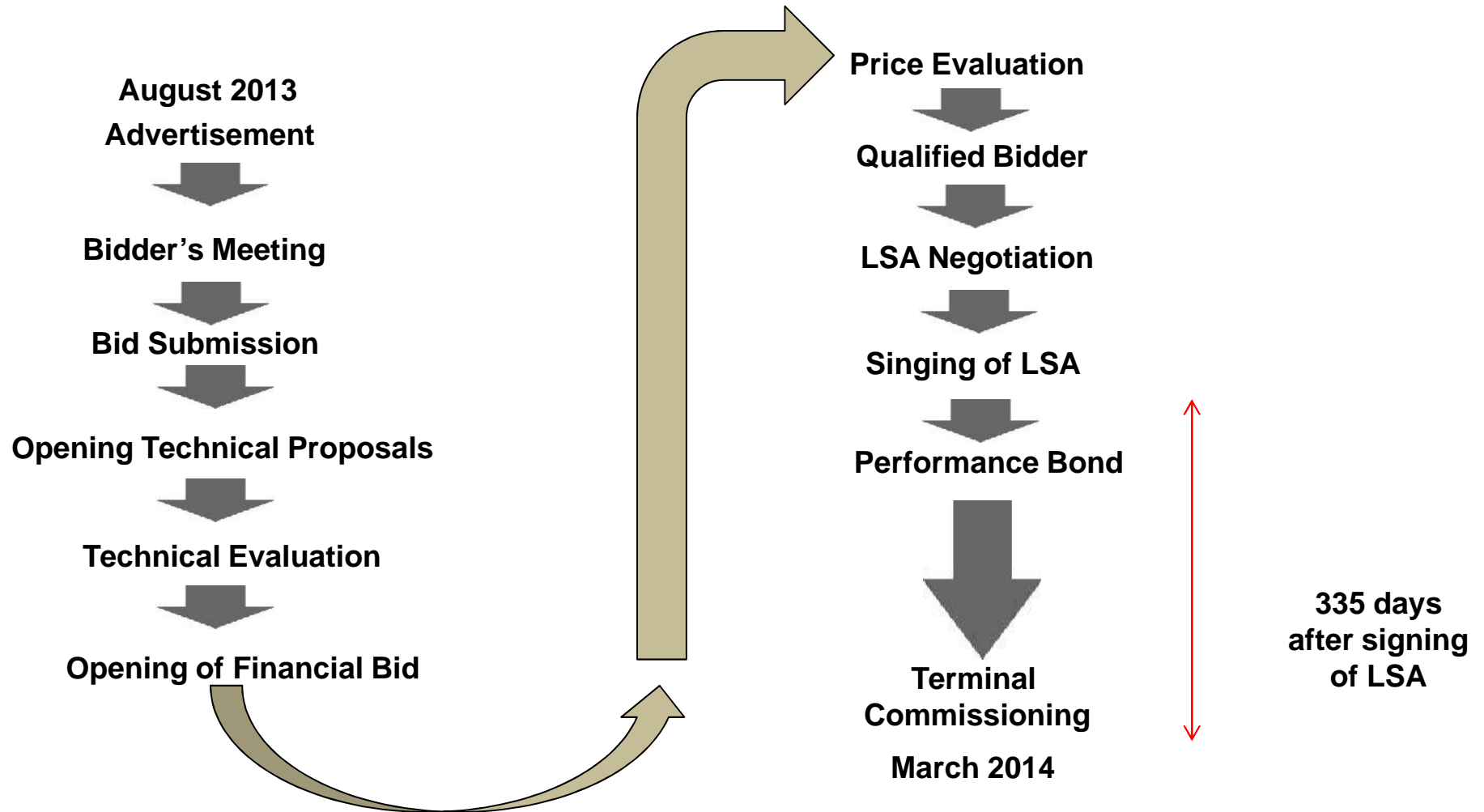
# Background

- Natural gas constitutes approximately 50% of the energy mix of Pakistan.
- The country is facing a severe energy crisis today.
- GOP has embarked on an ambitious plan to increase energy supplies by implementing a multi-pronged strategy.
- LNG terminals and LNG import is a cornerstone of this strategy.
- Pakistan's first LNG terminal has become operational and is receiving and re-gasifying LNG.

# Policy Directives

- Under the guidelines of Economic Coordination Committee (ECC) of the Cabinet, the Ministry of Petroleum initiated Pakistan's first ever LNG Terminal facility.
- An unbundled approach to LNG was used, separating the LNG Terminal operations from the LNG supply
- As no upfront payment was being made to the bidder for construction of the LNG terminal, a Tolling tariff broken down into Capacity Fee and Utilization fee as per LNG policy 2011 was adopted.
- QED, an experienced international consultant, sponsored through the USAID program was mandated the task of developing and overseeing implementation of the project.
- A 15 year tenor contract to regasify 200 MMCFD in the first year and increasing to 400 MMCFD from year 2 onward was selected.

# Bidding Process



Fully compliant with PPRA rules and regulations

# Implementation Process

- Pursuant to a bidding process and ECC / Cabinet approvals, SSGC and Engro Elengy Terminal (Pvt) Limited (EETPL) executed an LNG Services Agreement (LSA) on 30-04-2014 for provision of LNG receiving, storage and re-gasification services under a levelised tolling fee of \$0.66/MMBTU.
- Under the LSA, SSGC will pay \$ 272,000/day capacity charge for the first year and US \$ 228,016/day from year 2 to 15 with no escalation.
- EETPL also executed an Implementation Agreement with Port Qasim Authority on 23-06-2014 to develop and operate LNG Terminal at Port Qasim.
- EETPL has also laid a 42" dia 17-km and 24" dia 6-km pipeline from the Terminal upto SSGC Transmission hook-up point.

# Project Site Location



## Tolling Tariff

The LNG Terminal Tolling tariff of \$ 0.66/MMBTU obtained through a competitive bid process is one of the lowest rates in the world for a FSRU based LNG Terminal.

- Indonesia - \$ 1.2-1.8/MMBTU,
- China - \$ 0.87/MMBTU,
- Korea and Japan - \$ 0.89/MMBTU,
- Middle East - \$ 0.72/MMBTU, and
- European - \$ 0.81/MMBTU.

# Tolling Tariff Calculation

Year	MMCFD	MMBTU/	Capacity Charges Per Per Annum	Capacity Per MMBTU	Utilization Charges Per Annum	Tolling Fee
1	200	69,400,000	94,550,213	1.362395	4,353,462.00	1.4251
2	400	138,800,000	79,121,552	0.57004	8,706,924.00	0.6328
3	400	138,800,000	79,121,552	0.57004	8,706,924.00	0.6328
4	400	138,800,000	79,121,552	0.57004	8,706,924.00	0.6328
5	400	138,800,000	79,121,552	0.57004	8,706,924.00	0.6328
6	400	138,800,000	79,121,552	0.57004	8,706,924.00	0.6328
7	400	138,800,000	79,121,552	0.57004	8,706,924.00	0.6328
8	400	138,800,000	79,121,552	0.57004	8,706,924.00	0.6328
9	400	138,800,000	79,121,552	0.57004	8,706,924.00	0.6328
10	400	138,800,000	79,121,552	0.57004	8,706,924.00	0.6328
11	400	138,800,000	79,121,552	0.57004	8,706,924.00	0.6328
12	400	138,800,000	79,121,552	0.57004	8,706,924.00	0.6328
13	400	138,800,000	79,121,552	0.57004	8,706,924.00	0.6328
14	400	138,800,000	79,121,552	0.57004	8,706,924.00	0.6328
15	400	138,800,000	79,121,552	0.57004	8,706,924.00	0.6328
Total		2,012,600,000	1,202,251,941			
			<b>Levelized tolling tariff (US\$/MMBTU)</b>			<b>0.660</b>



# Port Capability

- LNG import is a new concept in Pakistan, and Port Qasim Authority (PQA) lacked the technical expertise to enable import of LNG.
- PQA was provided with International Technical Consultant for formulation of Rules and Regulations as well as assistance for operational readiness.
- Issues associated with Tug boats, Pilot training, Simulations, and Port charges were resolved.
- Documentation and port procedures were developed.
- Security arrangements were developed and are now in place for LNG vessels.
- Audits by shippers and third parties were conducted to achieve full port readiness to receive LNG vessels.

***Pakistan's First LNG Terminal  
Commissioned on  
March 29, 2015  
Handled 14 LNG Cargoes***





Thank You