



Tabriz Petrochemical Company
310 KTPA HDPE Plant
Vendor Planning, Scheduling and Reporting
Procedure



Class 1

Project	Sub-Phase	Unit	Disc.	Type	Serial No.	Rev.
HDPE-16	GM	00	PC	PRC	0003	03

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Vendor Planning, Scheduling and Reporting Procedure

Contract No. : 1400-102-18
Project : Tabriz 310 KTPA HDPE Plant
Owner : Tabriz Petrochemical Company (TPC)
Site : Tabriz Petrochemical Zone, East Azerbaijan Province, Iran

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1. General

1.1 Scope

This instruction covers the requirements for VENDOR's Time Schedule and Status Reporting which shall to be submitted by the VENDORS to EIED Co., hereinafter called Purchaser, in accordance with "VENDOR DATA REQUIREMENTS" shown in the Material Requisition / Purchase Orders / Contracts relevant to supply of equipment or material for this Project.

This instruction for VENDOR's Time Schedule and Reporting does not cover the documents concerning the shipping and the packing.

1.2 Project Description

Tabriz Petrochemical Company (hereinafter referred to as "TPC" or "OWNER") a company organized and existing under the laws of the Islamic republic of Iran, desires to establish and operate a High-Density Polyethylene (HDPE) plant hereinafter referred to as the PLANT for manufacturing of HDPE as products/services at Tabriz City, East Azerbaijan Province, Iran.

The PROJECT consists from main process units, utility distribution (as all required utilities will be supplied from existing facilities located in Tabriz Petrochemical Complex) and corresponding offsite facilities (i.e. product warehouse).

The PROJECT shall be capable to produce 310 KTPA of HDPE product with different grades as per corresponding process technology prepared by NPC Research & Technology (NPC-RT) as the Licensor.

The Tabriz HDPE plant consists of the following units:

Unit Code	Description
000	General
100	Powder Production Unit
200	Powder Workup Unit
300	Hexane Recovery
400	Auxiliary Production Unit
500	Pelletizing Unit
600	Pellet Homogenizing Unit
700	Bagging Unit
800	Utility Distribution & Safety System
900	Fire Fighting and Safety Systems

1.3 Definitions

- **PROJECT:** EPCC of Tabriz 310 KTPA HDPE Plant
- **OWNER:** Tabriz Petrochemical Company (TPC)
- **MC:** Namavarzan Delvar Engineering & Construction (NDEC) Co.
- **PURCHASER:** Energy Industries' Engineering and Design (EIED) Co.
- **CONTRACT:** The binding agreement between OWNER and PURCHASER (Contract No. 1400-102-18)

- **SUPPLIER:** Any company or person, to whom with prior approval has subcontracted directly or indirectly, at any level, any part of PROJECT (as a Subcontractor), or the PURCHASER has bought directly or indirectly, at any level, any material or equipment (as a Vendor) which are part of PROJECT.
- **TPA:** Means 3rd Party Authorities who will supply inspection and certification services and is independent from OWNER, MC, PURCHASER, and SUPPLIER.
- **TERMS AND EXPRESSION.**
 - **Shall:** Use to express a requirement.
 - **Should:** Use to express a strong recommendation.
 - **HOMA®:** HOMA® is a web-based Electronic Integrated Engineering Documents (EIED) management system and deployed for handling of engineering documents and comment sheets in E, P and C phase of the PROJECT as well.
 - **Field:** The site of the Tabriz HDPE Plant, on which the work of the PROJECT shall be proceeded. The Tabriz HDPE Plant and its site office is located at Tabriz, East Azerbaijan Province, Iran.
 - **Work:** All products/services related to the PROJECT.

2. Correspondences/ Transmittals / Important Notification:

All correspondences, transmittals and minutes of meeting shall be prepared in the following manner:

2.1 Language

The ruling language is the English language. All documents shall be in the English language.

2.2 Correspondences

Time Schedule and All Status Reports shall be submitted through HOMA or Email (if necessary).

2.3 Important Notification:

- I. E-file of Documents and transmittals shall be NAMED exactly same as the document number (same as above). Hence any other file naming shall be strictly avoided.

3. Vendor Print Index and Schedule - VPIS

Since Vendor receipt purchase order or letter of intent (LOI), they shall prepare VPIS with estimated issue date for all documents, and issue that before KOM, for EIED review and comment. VPIS shall be approved before any other Vendor's document be issued.

After VPIS is finalized, list of documents will be uploaded on HOMA by PURCHASER. This will enable Vendor to upload each document as per listed in their approved VPIS. Any documents that are not included in VPIS cannot be uploaded in HOMA unless Vendor sends a modification request to Purchaser.

All document's issue date in approved VPIS shall be in compliance with approved time schedule.

4. Vendor Document Submission & Purchaser's Approval

4.1 Purpose of Document Issue (POI):

All vendor documents shall be submitted to Purchaser with one of the following issue purposes according to the stipulation of Requisition. The submission purpose shall be clearly indicated on the original paper of the documents and transmittals.

- IFA: Issue for Approval
- IFR: Issue for Review
- IFI: Issue for Information
- AFC: Approved for Construction (Which will be applicable only for some special Purchase Orders which will be agreed upon at Purchase Order duration).

Above Purpose of issues shall be clearly indicated in Rev.00 of "Vendor Print Index & Schedule" in "**POI**" column for purchaser's review and approval.

Important Note: After receiving PURCHASER approval on VPIS, Vendors are not allowed to change any of document's POI unless submitting modification request to PURCHASER and receiving PURCHASER approval. So, on any change in VPIS, Vendor shall prepare and send modification request to PURCHASER.

4.1.1 IFA: Issue for Approval

Drawings and documents are initially submitted with "Issue for Approval (IFA)" status to ensure that all of the information required by Purchaser has been included before Fabrication/Purchase order can proceed.

Vendor shall provide and schedule 2 distinct activities for each document with IFA POI. The 1st activities will represent required duration to 1st Issue of the document and the 2nd activity will represent required duration for Final revision of the document.

Final activities which require input data that is necessary for Vendor in order to prepare and issue the Final revision of the document/Drawing, all the necessary Input Data shall be defined and scheduled and linked as predecessors of related Final activity in detailed time schedule.

For All Final activities fourteen (14) working days must be assigned as duration in Detailed Time Schedule.

4.1.2 IFR: Issue for Review

Drawings and documents which are defined with "Issue for Review (IFR)" POI in VPIS, shall be send to Purchaser before Fabrication/Purchase order can proceed.

Vendor shall provide and schedule 2 distinct activities for each document with IFR POI. The 1st activities will represent required duration to 1st Issue of the document and the 2nd activity will represent required duration for Final revision of the document.

Final activities which require input data that is necessary for Vendor in order to prepare and issue the Final revision of the document/Drawing, all the necessary Input Data shall be

defined and scheduled and linked as predecessors of related Final activity in detailed time schedule.

For All Final activities fourteen (14) working days must be assigned as duration in Detailed Time Schedule.

4.1.3 IFI: Issue for Information

Documents which are not required to obtain Purchaser's approval shall be submitted to the Purchaser with "Issue for Information (IFI)" POI, just for the Purchaser's Information. However, if Purchaser has any comments on the document with "Issue for Information (IFI)" status, Vendor shall incorporate Purchaser's comments within two (3) working days including transmission or mailing time after receipt of the commented documents from Purchaser and re-issue it.

All the necessary Input Data shall be scheduled and linked as predecessors in detailed time schedule.

4.1.4 AFC: Approved for Construction

This will be applicable for the Vendor with an EPC Contract (To be agreed with Vendor at Purchaser order stage). Hence at Final Documentation, all documents with AFC revision shall be issued in As-built status.

4.2 Acceptance / Rejection Categories

Code1 - (AP) Approved (Released for Fabrication/Procurement): Vendor can proceed with the subsequent work.

Code2 - (AN) Approved with note (Fabrication/Procurement may proceed): Vendor is not essentially required to do any rework or redesign. Therefore, Vendor may proceed with the subsequent work/ fabrication, if Vendor agrees to the comments and implements the comments in next revision of the documents. The revised documents, which comments are implemented, shall be submitted to Purchaser for obtaining final Approval status.

Code3 - (CM) Commented (Fabrication/Procurement shall not proceed): Vendor is essentially required to do rework or redesign. Therefore, Vendor is not allowed to proceed with the subsequent work/ fabrication. The revised documents, which comply with the comments, shall be submitted to Purchaser for obtaining Approval status.

Code4 - (RE) Rejected: Vendor shall re-design/ re-specify the contents of the documents according to the comments for rejection.

Vendor shall not proceed with subsequent work until the documents have been "AP" or "AN" or "NC" by Purchaser.

Code5 - (NC) No Comment: This code means No-Comment and is applicable only for Vendor's documents with "For Review" or "For Information" Status. Hence Vendor may proceed with the subsequent work.

5. Vendor's Progress Measurement System

All vendors' Documents will achieve progress according to below table:

POI	Appraisal Codes					
	Issuance	Code5	Code4	Code3	Code2	Code1
Issue for Information (IFI)	100%	100%	0%	0%	0%	0%
Issue for Review (IFR)	50%	100%	0%	50%	90%	100%
Issue for Approval (IFA)	40%	40%	0%	40%	80%	100%
Approved for Construction (AFC)	40%	40%	0%	40%	80%	100%

6. Vendor's WBS and Time Schedule

6.1 Work Breakdown Structure - WBS

Within three (3) working days after KOM, Vendor shall prepare project WBS as per attached EIED's Template (attachment #1) and weight all WBS levels. The weighted WBS shall be sent to Client via HOMA.

6.2 Detailed Time Schedule and Project S-Curve

Vendors shall prepare Detailed Time Schedule in MSP/P6 format (ver. 2016/ P6 v17), including All WBS levels such as Detail Engineering, Procurement, Manufacturing, Final Inspection, Ex-Works, Delivery, and Final Book as EIED's Template (attachment #3). The result of the Time Schedule which projects Planned Monthly Progress, shall be shown with Project Overall S-Curve (according to sheets 4 and 5 in attached PMS & Report Template (attachment #2).

The below milestones should be defined in Baseline Time Schedule as minimum requirements:

- PO Sign Date
- Kick-off Meeting Date
- Receiving Advanced Payment Date
- Project Start Date
- PIM Date
- Project Finish Date

Since, vendor received EIED's Approval on their WBS, they shall prepare a Detailed Time Schedule base on approved WBS and issue 1st revision of Detailed Time Schedule with relative Overall Progress S-Curve, during ten (10) working days after KOM, via HOMA in order to be checked and approved by EIED Company.

Once the Vendor's time schedule is approved by EIED, the approved Time schedule is called "**Baseline Time Schedule**". As a reference, Baseline Time Schedule is a complete copy of the project time schedule that can be compared to the Updated Time Schedule for controlling and monitoring project performance.

In Baseline Time Schedule preparation following rules shall be followed by Vendors:

Note1: Project **Start Date** shall be scheduled on **Effective Date**.

Note2: “Project Must **Finish Date**”, shall be scheduled according to Contractual Project Duration.

Note3: Vendor shall schedule two (2) specific activities representative of 1st issue and Final issue for each document with IFA/IFR POI.

Final issue is after implementing EIED comments to receive Code1, Code 2 or Code5 and implementing any necessary input data to complete vendor’s design/document as predecessor. For documents with IFI POI, one activity is enough.

Note4: Vendor shall define all necessary documents for their Procurement and Manufacturing completion (Including but not limited to: PIDs, GA drawings, Calculation, Data Sheets, etc.) as **MAIN** document in related column in Vendor’s MDR (indicators: P for procurement and M for manufacturing).

All Vendor’s document which have Interface with EIED’s Engineering Activities or for the CONSTRUCTION Contractor Activities such as: Equipment size/dimensions, loads of foundation, Anchor bolts, Layout, Power/Utility consumption, Piping/Electrical/Instrumentation connections, etc. shall be defined as **CRITICAL documents** in in related column in Vendor’s MDR (indicator: C for Critical docs).

All document’s issue date in VPIS shall be in compliance with approved time schedule.

Note5: All Activities and Milestones shall have specific "Predecessor(s) & Successor(s)" except Project Start and Finish Milestones.

Note6: % Complete Type of All activities in Time Schedule shall be set as “**Physical % Complete**”.

Note7: Calculation method for All Activities and WBS Levels shall be set on “**Auto Schedule**”.

Note8: Constraints (such as MUST Start/Finish On, Start/Finish Not Later than) shall NOT be used in Time Schedule.

Note9: All Activities and Milestones shall have specific "Predecessor(s) & Successor(s)" except Project Start and Finish Milestones.

Note10: ONLY 10% of All Activities could be linked with “Lag” with maximum duration of one month, but no Lead(s).

Note11: Lag Duration shall not be longer than 2 reporting periods.

Note12: All estimated issue dates given in VPIS, SHALL be in compliance with Baseline Time Schedule.

Note13: After receiving approval on Time schedule, Vendor shall set A Baseline in MSP/P6 for calculating Physical Progress and further project progress Monitoring and Control.

6.3 Updating Time schedule

Detail Time Schedule shall be prepared as clause 6.3 and be updated Monthly, by setting STATUS Date / Data Date on Month Cut-off date, inserting Actual START/FINISH Dates, defining Remaining Duration for in progress Activities and finally rescheduling Project by applying “Rescheduling uncompleted work to Start after” option in MSP.

Also, Vendor shall submit the Native and PDF files of updated time Schedule as attachment of Monthly Progress Report.

Note14: For Contracts with less than 3 months duration, Updating Master/Overall Time Schedule (at the Level of Main Phases) for each month is required and Vendor shall submit the Native and PDF files of updated Master/Overall time Schedule as attachment of Monthly Progress Report.

6.4 Catch-up (Recovery) Time Schedule:

When there is a considerable delay in the project, EIED may request the vendor to compensate the delay by issuing a catch-up plan. In Catch up Time Schedule the finish date of project is the same as the Baseline Time Schedule finish date, but vendor should accomplish the remaining work in an appropriate way to accelerate the project execution. As a result, the periodic plan progresses will be changed compared to Plan S-Curve.

6.5 Re-plan:

Along with the project progress, the update information may detect some deviations from Baseline Time Schedule, caused by various factors. If the variances are significantly beyond the Baseline Time Schedule, some adjustments are considered to be applied to the time schedule; and vendor will be asked to issue a re-plan to EIED.

The re-planning will be according to the conditions mentioned in the contract and also project specific considerations in the time of the re-planning. In the Re-plan time schedule, the project duration may be extended. The amount of extension should be permissible by the client while EIED approves the vendor's Re-plan. Vendor should consequently calculate the amounts of Re-plan S-Curve and illustrate its corresponding S-Curve in the reports.

7. Master Document Register - MDR

Master Document List shall be prepared as per attached Report Template and be issued in 2 steps. At **1st step**, All Documents in MDR shall be WEIGHTED and the weighted MDR shall be issued one day after VPIS approval via E-mail.

At **2nd step**, All Documents in MDR shall be DATED according to approved Detail Time Schedule .so the Dated MDR shall be issued via E-mail one day after Detail Time schedule Approval.

8. Vendor's Bi-Weekly/Monthly Status Reports

Each vendor is responsible for issuance of status report and updating their Time schedule according to the attached PMS & Report format (Attachment #2).

Cut-off and submission dates of status reports is described below:

- **Bi-weekly Cut-off date:** End of Wednesdays
Submission date : Thursday at 11:00 AM.
- **Monthly Cut-off date :** 20th of Each Shamsi Month.
Submission date : By end of 21th of Each Shamsi Month via HOMA.

Each month **Updated Time Schedule** and **updated VPIS** shall be submitted to EIED as attachments of **Bi-weekly** and **Monthly** Progress Reports.

9. Final Data Book and As-Built

After receiving purchaser's approval on the latest revision of vendor documents and upon completion of shop fabrication and inspection, Vendor shall submit Final documents such as “As-built” documents, Operating Manual and other Documents to the Purchaser **within Three (3) weeks** after shipment, to achieve the related Final Progress, according to below table:

		Soft Copy	EIED Approval	Hard Copy
Final Book Package Inc. All As-builts & Final revision of Approved Docs	Step %	30%	10%	60%
	Cum. %	30%	40%	100%

“As-built (AB)” documents shall contain all changes made during fabrication and inspection, if any. Documents which do not subject to any change shall also be issued as “As-built” updating revision numbers.

10. List of Attachments

Attachment #1	WBS Sample
Attachment #2	Monthly Progress Report Template
Attachment #3	Detailed Time Schedule Sample