

Standard Operating Procedures for PSC processes

# **General Guidelines**

- 1. The objective of this document is to develop a Standard Operating Procedure (SOP) regarding the contractual processes under production sharing contract in a bid to fast track the entire process by bringing uniformity and simplicity.
- 2. The SOPs are the guiding principles and shouldn't be treated as an exhaustive list of checkpoints in the evaluation of any case and concerned department may take into account the all relevant aspects of the case while examination.
- 3. These SOPs cannot be taken to over-ride the PSC provisions or active MoPNG policy notifications or any other statutory provision including standard accounting standards and commercial practices, which will continue to prevail unless the competent authority issues a separate notification.
- 4. These guidelines are generally applicable for E & P operations in the realm of PSC regime.
- 5. PSC/PF group would be the responsible for initiating the process under this SOP, regarding coordination, examination and approval starting from submission of the proposal till signing of Management Committee Resolution (MCR).

# **Table of Contents**

•	Stand	ard Operating Procedure for PSCs	5
	1.1.	Work Programme & Budget – BE and RE	5
	1.2.	Appointment of auditor	12
	1.3.	Well Location Review/ Change/ Deepening-Exploration & Development	14
	1.4.	Grant of Extension of Phase	17
	1.5.	PEL grant or extension applications	19
	1.6.	PML grant or re-grant application	21
	1.7.	Notice for entering next Phase or Relinquishment	23
	1.8.	Notify DGH for Test (DST/Well testing/Production testing)	26
	1.9.	Submission of Format-A: Information of discovery	29
	1.10.	Submission of Format-B: Potential Commercial Interest	32
	1.11.	Submission of Format-C: Commercial Discovery	35
	1.12.	Calibration of flowmeters, witness custody transfer operations	38
	1.13.	Inventory Report	40
	1.14.	Local goods & service report	42
	1.15.	Submission of Bank Guarantee + Legal Opinion & renewal and Revised Bank	
		Guarantee	44
	1.16.	Information about hiring of vendors through tenders	47
	1.17.	Change of MC members	49
	1.18.	Submission of G&G data	51
	1.19.	Submission of Insurance & Indemnity	53
	1.20.	Submission of operating agreement	55
	1.21.	Submission of accounting procedure	57
	1.22.	Environment Impact Assessment report 1 & 2	59
	1.23.	Contingency Plan	61

# Standard Operating Procedures for PSC processes

1.24.	Submission of Unit Development Plan	63
1.25.	Submission of Field Development Plan	66
1.26.	Value of Production and Pricing Statement	69
1.27.	Quarterly Reports	71
1.28.	Cost and Profit Petroleum Calculations	73
1.29.	Annual statements	75
1.30.	Vendor qualification Criteria	81
1.31.	Measurement of Petroleum	83
1.32.	LD/Cost of Unfinished work programme	85
1.33.	Assignement/Transfer of participating interest	87

# 1. Standard Operating Procedure for PSCs

# 1.1. Work Programme & Budget – BE and RE

#### Article of PSC:

NELP I to IX: Article 5 & 10

Pre NELP Exploration & Pre NELP field: Article 4

# **Standard Operating Procedure:**

#	Department	Procedure					
1.	PF/PSC dept.	Operator submits WP&B for the particular FY					
	Prerequisites	a. WP&B document					
		o. Signed OC resolution					
		c. Variance Statement BE versus RE with justifications					
	Checks	a. Block is active with active PEL/ML.					
		b. WP&B has been submitted within due date i.e. 31st December of FY.					
		Reasons for delay in submission of WP&B is recorded.					
		<ul> <li>In case of non-submission, show-cause notice may be issued to</li> </ul>					
		operator.					
		<ul> <li>In case of non-submission despite issuance of show-cause notice, termination notice to be issued.</li> </ul>					
		c. OC resolution has been submitted along with WP&B					
		In case OCR is not submitted, query may be raised					
		<ul> <li>In cases of delay in submission of OCR, WP&amp;B proposal may be</li> </ul>					
		summarily rejected.					
2.	Technical	G&G/Drilling/Production/Reservoir – As the case may be					
	Prerequisites	a. MCR of previous FY approved WP&B BE					
	-	b. Proposal of previous WP&B RE					
		c. Fact-sheet of the block.					
		d. In case well/s are proposed in WP&B then technical details of the					
		well/s may be provided in requisite format.					
		e. If the well/s proposed are exploratory wells, then the MWP depths					
		against which the well/s are proposed.					
		f. In case of RE proposals; approved BE proposal, variance between BE					
		and RE and justification for same.					
	Checks	G&G department:					

# Department	Procedure
	a. Find current year MC-approved BE, RE with actual for Q1-Q2-Q3 and
	proposed for Q4
	b. Separate out activities related to G&G (API and analysis or
	interpretative reports) and ask reports of activities accomplished.
	c. Find activities which are repetitive, dropped and/or any new added.
	d. Review next year BE vis-à-vis spill-over from current year and new activities for next year.
	e. Regard all future activities as contractual/MC mandate like MWP, Appraisal Plan, Commerciality Plan, FDP/ RFDP, EIML, Phase exit etc.
	f. Check out budgetary quotes or actual costs if proposed seemingly high and ask for CF attention
	g. Send back to PSC/PF with queries if any for clarification and addendum. Else review as conclusive and agreeable.
	Drilling department:
	a. If well/s proposed are appraisal wells: Check technical data of well/s vis-a-vis approved Appraisal Programme.
	b. If well/s proposed are development wells: Check technical data of well/s vis-a-vis approved FDP/RFDP.
	c. If technical details of well/s are in order then Work Programme may be agreed.
	d. Else, query may be sought from operator until satisfactory replies are provided.
	e. RE proposals: Variance between BE and RE and justification for same may be reviewed.
	f. If variance between BE and RE, and justification for same are found to be in order then Work Programme may be agreed.
	g. Else, query may be sought from operator until satisfactory replies are provided.
	h. In case replies/ satisfactory replies are not provided by the operator
	the Work Programme may NOT be agreed and same may be intimated
	to PSC/PF for necessary action.
	Production department:
	BE case

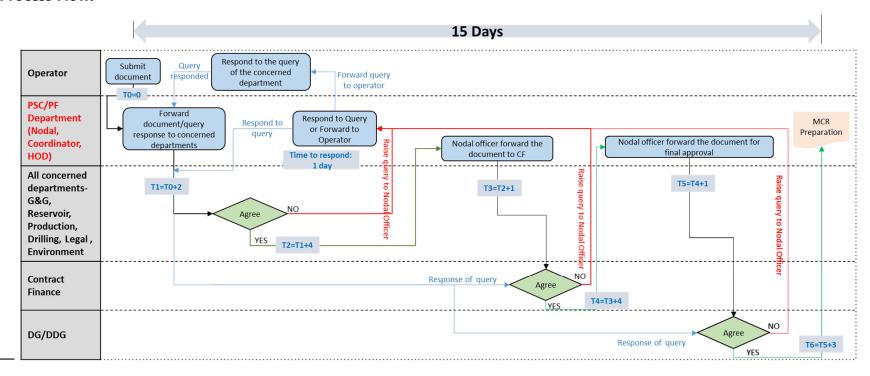
#	Department	Procedure								
		I. Calculate Production Performance against the targets of current year in								
		terms of percentage achievement.								
		a. Estimate	the likely	v prodi	ıction	at the en	d of	the curr	ent Fi	nancial Year
		as below		y proud	action	at the en	u 01	the carr	Circ i i	nanciai reai
			Annual	Targe	t for	Actual fo	or	%		Estimated
			Target	curre	-	current F		achievem	nent	production
		Description	for Current	up to mont		up to the				for current FY
			FY	evalua		evaluatio				
			Α	В	3	С		D = C/B	Х	E
		Oil						100		
		Gas								
			_							
		J		•		•				Year to be
		•	•			with the	oii a	ind gas i	PQ/ t	argets given
		in BE pr	oposal as Estim			PQ next	Diff	erence	Pos	ason(s) for
		Description	product			FY	וווט	erence		ariance
			curre							
		0.1	Е			F	G	i=E-F		
		Oil Gas								
			e the devia				DP/	IFDP/ RF	DP et	c. quantities
			Development		BE PQ next FY					ason(s) for
		Description	Plan (DP) Quantity for				-	oposed s % of	`	/ariance
			next F					DP		
						_	_	uantity		
			н			ı	J:	= I/H x 100		
		Oil								
		Gas								
		II. Evaluation				·	·		nt ito	ms/activities
			BE for ne		Juuct	ion related	الما دل	mmune	יונ ונפ	1113/ activities
					n (Act	ivity)		WP	₽BF	
			ommitment item (Activity) prilling of Development Wells				AAL	~ <u>~</u>		
			Work-Over (with Details) of wells							
			ell Stimul	-	-					
			tificial Lift							
		05 Su	ırface Faci	lities						

#	Department	Procedure						
		07 A		production	n related ac			
		<ul><li>a. Above activities to be examined whether acceptable from product point of view.</li><li>b. Query if required for seeking clarification.</li></ul>						
		c. Followi      Activ  IFDP      Activ	ng points ities prop /RFDP etc.	are check oosed mu	ed while ev	aluation of line with	MC appr	oved FDP/
		III. Seek esting proposed Western three sub-	P&BE of th	ne next F\	and seek tl	ne estimat	ed produc	tion figures
		RE case						
		I. Calculate terms of per			_	st the targ	ets of cur	rent year in
			nate the li as below:	kely prod	uction at th	ne end of	the curre	nt Financial
		Description	Annual Target for Current FY	Target f current up to th month evaluation	FY current ne up to t of month	FY achie		Estimated production for current FY
			Α	В	С		C/B x 100	E
		Oil						
II. Performance of WP committed production related activities of curyear and reasons for variance, if any:  a. Reasons for variance between proposed production related action of WP&RE with activities as per MC approved WP&BE for current to be recorded as below:						ed activities		
		No. Commitment item (Activity)			BE current FY	RE current	Reasons	•
	(Activity)		current FY (MC approved)	FY	variance			
			ing of elopment	Wells				
			_		•	FY	variance	

#	Department	Procedure				
		2 Work-Over (with Details) of wells 3 Well Stimulation (Details) 4 Artificial Lift 5 Surface Facilities 6 Pipelines/ piping 7 Any other production related activity  b. Check if reasons for variance are acceptable or not c. For additional activities proposed and budget amount revision, reasons to be sought from operator.				
		Reservoir Department:				
		BE: Data acquisition and analysis need to be specified and budget need to be itemized activity wise separately for Reservoir related Data Acquisition and Analysis.				
		RE: Activities performed need to be specified and expenditure need to be itemized activity wise separately for Reservoir related Data Acquisition and Analysis.				
		The related reports are to be submitted.				
		Budgeted amount (plan and actual) for respective activities shall be evaluated as per prevailing standard industry competitive rates, quantum of work and reasonable justification.				
3.	Contract finance	Contract finance receives all the files for their examination.				
	Prerequisites	a. OC approval of WP&B BE and RE b. MC approved BE for current year RE c. Concurrence from technical departments.				
	Checks	Budget should be submitted line item wise Work estimate vs. Actual If block is producing, SRF account open or not. Cost benefit analysis in terms of Revenue vs. Production cost FDP approval for producing field. Cost submitted should be as per Appendix H of PSC				

# Standard Operating Procedures for PSC processes

#	Department	Procedure
		g. Cost of disallowed activity as vetted by technical department will not be considered in WP&B.
4.	DDG	PSC/PF department receives the evaluated WP&B and submits the proposal for approval of DDG.
	Prerequisites	WP&B evaluation summary sheet with concurrence from all technical departments and CF department.
	Process	Approval sheet
	Output	
5.	PSC/PF	PSC/PF department prepares the MCR



# 1.2. Appointment of auditor

# **Article of Contract:**

NELP I to IX & Pre NELP Exploration:- Article 25

Pre NELP field :- Article 24

#	Department	Process Flow Step						
1	PSC/PF	Operator submits proposal for Appointment of auditor for a particular FY to DGH						
	Prerequisites	OC approval for appointment of auditor						
	Checks	<ul><li>a. Check that proposal is submitted within sixty (60) days from the end of the Financial Year through the approved auditor as per appointment of auditor procedure.</li><li>b. Check that the proposal includes adequate details on the Auditors (Name, Fees and Address).</li></ul>						
2	Contract finance	Contract Finance receives all the files for their examination.						
	Prerequisites	a. Previous year MCR for approved appointment of auditor						
	Checks	a. Auditor is not the same for the previous three FY						
3	DDG	Evaluated documents are submitted for approval of DDG by PSC/PF Dept.						
	Prerequisites	Summary sheet of proposal along with comments of CF and nodal section.						
	Checks	Concurrence by CF						
4	PSC/PF	Prepare draft MCR for signature.						

#### **Process Flow:** 5 Days Submit the Query responded Query document Operator responded by the operator Forward query PSC/PF to operator Forward Department MCR Respond to Query Respond to query document/query (Nodal, Preparation or Forward to response to concerned Nodal officer forward the document for Coordinator, Operator Raise query to operato departments final approval HOD) Time to respond: T4=T3+1 1 day T2=T1+2 T1=T0+1 6 NO Contract Agree Finance T3=T2+1 YES DG/DDG Response of query Agree YES

# 1.3. Well Location Review/ Change/ Deepening-Exploration & Development

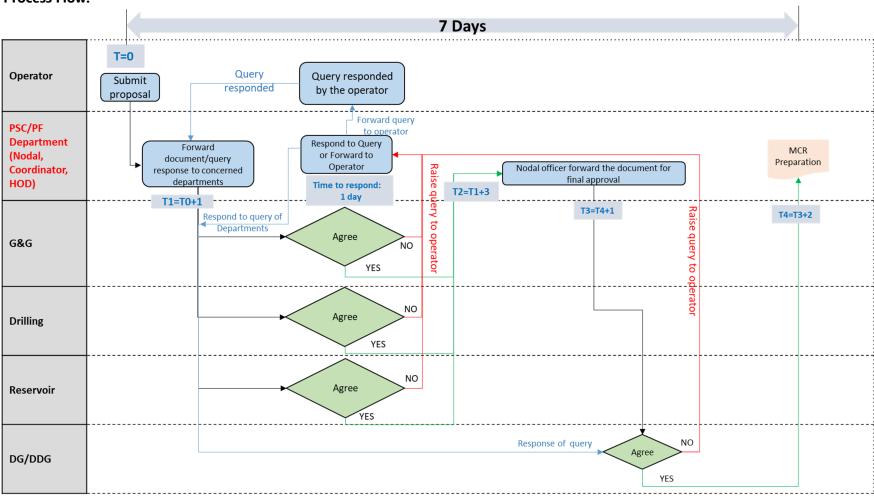
#### Article

NELP 1 to 9:- Article 5

Pre NELP Exploration & Pre NELP discovered field:- Article 4

#	Department	Procedure
1.	PSC/PF	Proposal for Well Location Review/ Change/ Deepening- Exploration & Development is examined
	Prerequisites	OC approval.
	Checks	<ul> <li>a) Operator's proposal is in line with MWP commitment as per PSC</li> <li>b) Phase validity of the block</li> <li>c) If the proposed well is a Development well, then to check whether the well is in line with the MC approved FDP.</li> <li>d) For Change/Deepening of Well Depth: To check whether the operator has submitted Justifications for the same</li> </ul>
2	Technical	Technical department receives files for their examination.
	Prerequisites	<ul> <li>Proposal for Well Location Review/ Change/ Deepening- Exploration &amp; Development</li> <li>Any additional documents for reference</li> </ul>
	Checks	G&G department:
		<ul> <li>a. Check if the location is proposed pursuant to the following:</li> <li>Mandatory/ Minimum Work Programme (PSC/OALP)</li> <li>Exploration programme under Nomination</li> <li>Exploration within PML</li> <li>b. Check the nature of the Plan that may include singly or in combination, any Acquisition/ Processing/ Interpretation (API) of geo-scientific data and exploratory well drilling within the</li> </ul>
		license/lease
		<ul> <li>c. Examine the following:</li> <li>Well coordinates (surface and sub-surface), and target depth if location planned</li> <li>Top structure and seismic attribute maps of the prospect(s) to be drilled</li> <li>Interpreted seismic sections and well correlation across offset drilled wells along with new location if proposed</li> </ul>

#	Department	Procedure
		<ul> <li>d. Review the following: <ul> <li>Structural and/or stratigraphic entrapment</li> <li>Petroleum system elements and associated risks</li> <li>Prospect size and associated uncertainties</li> </ul> </li> <li>e. Operator to share all input data sets and interpretations, work flows, results related to geological concepts and seismic through due submissions of scaled and annotated sections, maps and models wherever applicable.</li> <li>f. Complete review of the Exploration proposal.</li> <li>g. Any different view that might emerge during review of the proposed activities, may be put up to MC for appropriate deliberation.</li> <li>h. Post-drilling, in the event of any discovery, Operator to notify the same by submitting Format A &amp; B.</li> </ul> <li>Drilling department: <ul> <li>a. Takes note of the proposal and drilling parameters involved</li> </ul> </li>
3	DDG	PSC/PF to prepare summary sheet with comments of technical documents for approval of DDG.
	Prerequisites	Summary sheet of the Well location review/ change/ deepening
	Checks	Approves the file taking cognizance of recommendations from technical departments.
6.	PSC/PF	PSC/PF department prepares the MCR



## 1.4. Grant of Extension of Phase

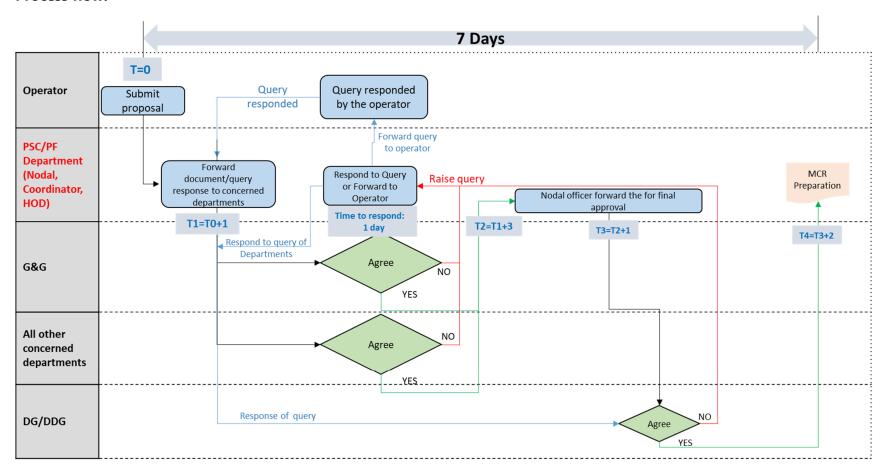
# **Article of PSC:**

NELP 1 to 9:- Article 3

Pre NELP Exploration :- Article 2

**Policy:** - MoP&NG policy on extension in exploration phases for PSCs, 18<sup>th</sup> April, 2006

#	Department	Procedure					
1	PSC/PF	Proposal for Grant of Extension of Phase is examined					
	Prerequisites	OC approval.					
	Checks	a. Request is submitted at least thirty (30) days prior to the expiry					
		of the Initial Exploration Period b. Status of MWP and any pending liability w.r.t. CoUWP/LD					
2	Technical	Technical department receives files for their examination.					
	Prerequisites	a. Proposal for extension of phase					
		b. Any additional documents for reference					
	Checks	G&G department:					
		a. Check the status of unfinished MWP					
		b. Review of additional Work Programme, if any					
		Drilling department:					
		a. Review of additional Work Programme, if any					
3	Contract finance	CF receives file for review					
	Prerequisites	a. Comments of Technical department					
		b. Quantum of Unfinished work program, if any					
	Checks	Calculation of LD and BG, if unfinished work program exists.					
3	DDG	PSC/PF to prepare summary sheet with comments of					
		technical documents for approval of DDG.					
	Prerequisites	Summary sheet for grant of extension of phase					
	Checks	Approves the file taking cognizance of recommendations from					
		technical and CF department.					
4	PSC/PF	PSC/PF department prepares the MCR.					
	department						



# 1.5. PEL grant or extension applications

#### **Article of PSC**;

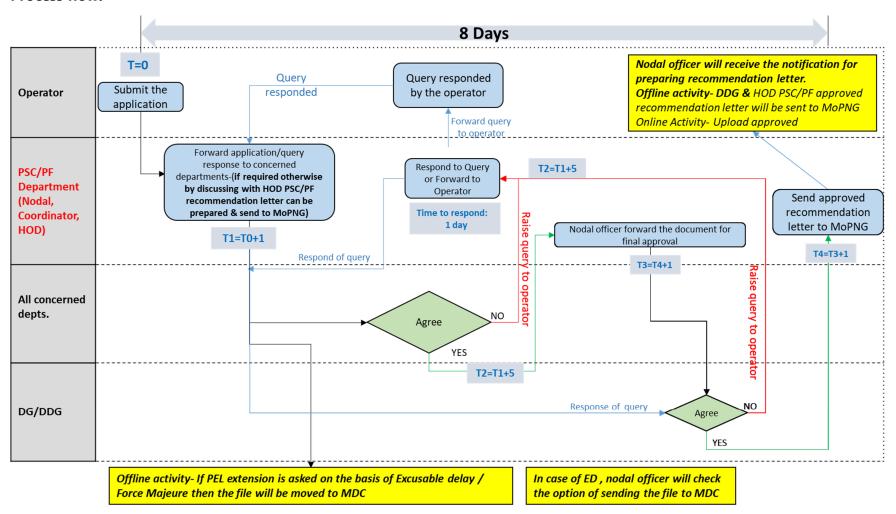
NELP 1 & 2:- Article 9

NELP 3 to 9:- Article 11

Pre NELP Exploration :- Article 2

Policy: - MoP&NG policy on extension in exploration phases for PSCs, 18<sup>th</sup> April, 2006

#	Department	Procedure
1.	PSC	Operator submits the PEL grant proposal & required documents for approval
	Prerequisites	a. PEL application b. Signed contract
	Checks	<ul> <li>a. Proposal to be submitted as early as possible, but not later than fifteen (15) Business Days from the date of execution of this Contract.</li> <li>b. Examines the Operator's proposal based on Articles of PSC</li> <li>c. PSC is active</li> <li>d. Payment of PEL fees</li> </ul>
2.	DDG	Proposal is put up for approval of DDG by PSC group
	Checks	Approves the PEL grant / extension proposal based on recommendation of PSC group
3.	PSC	PSC department sends recommendation letter to MoPNG



## 1.6. PML grant or re-grant application

#### Article of PSC;

NELP 1 to 9:- Article 11

Pre NELP Exploration :- Article 2

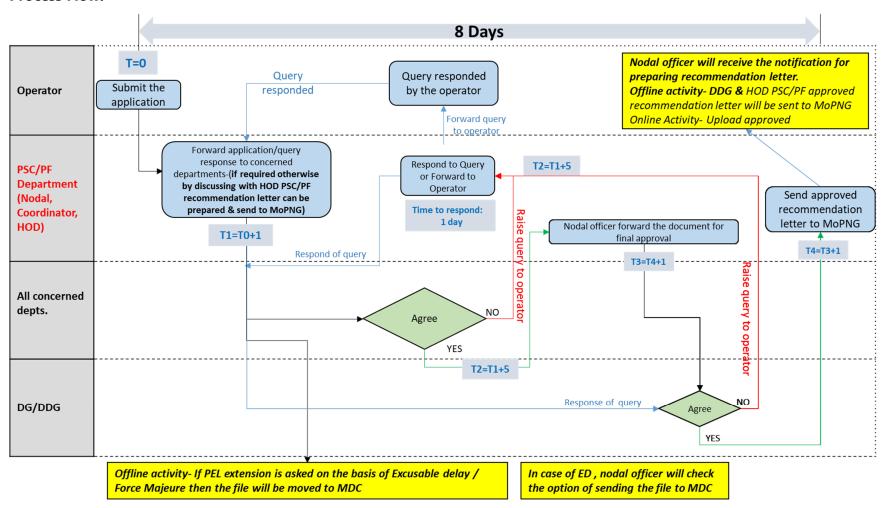
Pre NELP discovered field :- Article 2 & 8

#### Policy: -

1) MoP&NG Policy for the Grant of Extension to the Production Sharing Contracts signed by Government of India awarding Pre-New Exploration Licensing Policy (Pre-NELP) Exploration Blocks, 7th April 2017

2) MoP&NG Policy for grant of extension to Production Sharing Contracts signed by Government awarding small and medium sized discovered fields to private Joint Ventures, 28th March 2016

#	Department	Procedure
1.	PF	Operator submits the PML grant proposal or PML extension proposal along with supporting documents
	Prerequisites	<ul><li>a. PML grant application, or</li><li>b. PML re-grant application with RFDP</li></ul>
	Checks	PML grant application:
		a. MC approved FDP
		b. Valid contract
		c. Payment of PML fees
		PML re-grant application:
		a. Submission of RFDP (Evaluation of RFDP will be through separate
		procedure as listed in PSC-MS)
		b. Valid contract
		c. Payment of PML fees
2.	DDG	Proposal is put up for approval of DDG by PF group
	Checks	Approves the PML grant / re-grant proposal based on
		recommendation of PF group
3.	PF	PF department sends recommendation letter to MoPNG



# 1.7. Notice for entering next Phase or Relinquishment

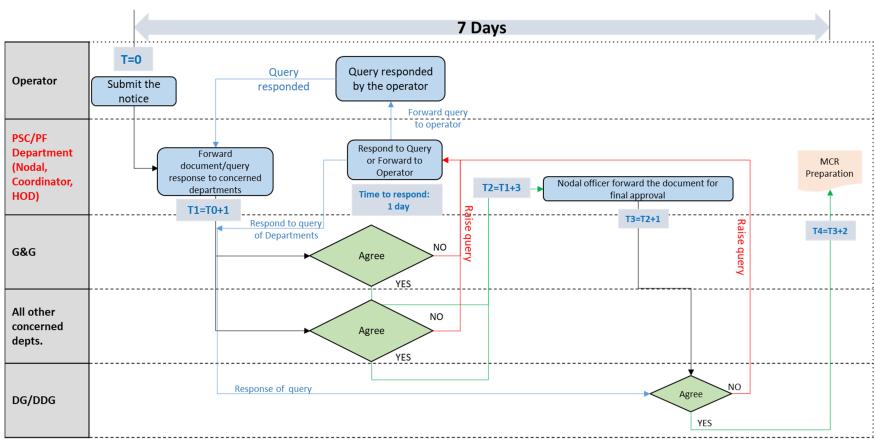
## **Article of PSC:**

NELP 1 to 9:- Article 3 & 4

Pre NELP Exploration :- Article 2 & 3

#	Department	Procedure
1	PSC/PF	Operator submits proposal for entering next phase or relinquishment along with supporting documents
	Prerequisites	a. OC approval
	Checks	<ul><li>a. Proposal must be submitted 30 days prior to the expiry of exploration phase.</li><li>b. Status of MWP and any other pending liability (CoUWP/LD, Data, PEL fees)</li></ul>
2	Technical	PSC/PF forwards its comments to concerned technical dept. for review.
	Prerequisites	<ul><li>a. Proposal for next phase of relinquish</li><li>b. Any additional documents for reference</li></ul>
	Checks	G&G department:
		<ul> <li>a. Relate the 'technical' circumstances of exit other than those of administrative reasons</li> <li>b. Examine the completion status of MWP. <ul> <li>Exploratory stage: (1) No discovery (2) Sub-commercial/marginal discoveries not pursued</li> <li>Confirm MWP well depths</li> <li>Confirm Geological objective of wells drilled to PSC/MC recommendation</li> <li>Confirm Basement top</li> <li>Coordinate with NDR/PSC for handover over data sets</li> <li>Development stage (1) Sub-surface surprises, not commensurate with forecast:</li> </ul> </li> </ul>
		<ul> <li>Review the activities undertaken pursuant to the approved FDP and support data handover process in coordination with NDR/PSC</li> <li>Production stage (1) Field reaching economic limit, (2) OPEX exceeds revenue from sales</li> </ul>

#	Department	Procedure
		<ul> <li>Review the latest development plan vis-à-vis field production and 3<sup>rd</sup> party reserves audit report. Support data handover process in coordination with NDR/PSC</li> </ul>
		If work program is unfinished, the proposal will be put up by PSC group under process of 'Cost of Unfinished Work Program calculation' in PSC-MS.
		NDR department:
		a. Data uploaded in NDR to be commensurate with activity carried out in block.
		b. 2D, 3D, Log and well, reports and associated data as per PSC
4.	Contract	Proposal to be forwarded to CF dept. for relinquishment cases
	Finance	
	Prerequisites	a. Comments from Technical Department
		b. MWP status
		c. OC approval
	Checks	a. Payment of statutory levies
		b. Financial liabilities, if any
5.	DDG	PSC/PF department prepares the summary sheet and forwards
		the same for approval of DDG
	Prerequisites	Summary sheet for entry into next phase or relinquishment
	Checks	Recommendations from concerned departments
6.	PSC/PF	PSC/PF department prepares the MCR



# 1.8. Notify DGH for Test (DST/Well testing/Production testing)

#### **Article:**

NELP 1 to 9:- Article 10

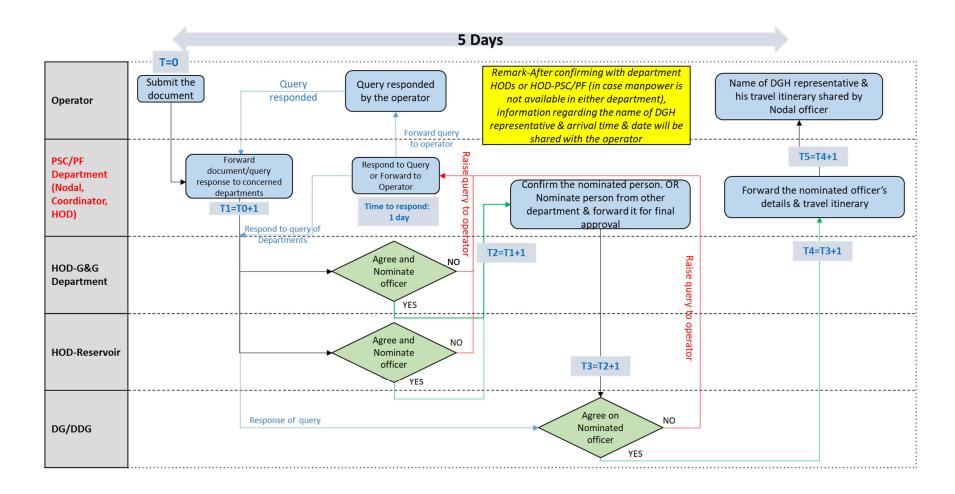
Pre NELP Exploration :- Article 9

Pre NELP discovered field :- Article 9 (Direct submission of the test results as part of development plan in Article 9-DEVELOPMENT AND PRODUCTION)

Policy: - MoP&NG Policy for testing requirement, 29th April 2015

#	Department	Procedure
1	PSC/PF	PSC/PF department receives proposal for test.
	Prerequisites	a. Request for test
		b. Required documents for approval
	Checks	a. Request must be submitted at least 48 hours prior to test
		b. Check whether the parameters/details of the testing
		zones/formations are as per signed MCR
3.	Technical	Technical department receives all the files for their
	department	examination.
	Prerequisites	a. Request for test
		b. Any additional documents for reference
	Checks	G&G department: (DST)
		a. Check if the location is drilled pursuant to management
		committee review
		b. Check the following:
		Type of Well (Exploratory/ Appraisal)
		Geological Objective/ Formation
		Well logs describing Zone of testing
		Top structure map at prospect level
		Seismic attribute map of the prospect
		Interpreted seismic sections (IL/XL/RC)
		Offset well correlation of reservoir, if any
		Status of current operation at the well
		c. Check / Analyze the following:
		Petroleum entrapment through prospect analysis
		<ul> <li>Reservoir description through quick-look well log evaluation</li> </ul>
		d. Assure that the zone under testing is the very first 'likely'
		occurrence of petroleum in the given license/ lease area

#	Department	Procedure
		<ul> <li>e. Nominate Officers at DGH from across core professionals preferably geologists and petro-physicists</li> <li>f. Follow up with well/drill site to ensure that the zone has been perforated and flow of hydrocarbon is established and stabilized for witness by DGH representative</li> <li>g. Officer-on-job to see and record all relevant details of the zone-under-testing in line with the requirement of Format 'A' and Format 'B'</li> <li>h. On return, DGH representative will submit a Field Note, which is to be read while reviewing Operator's proposal for Format 'A' &amp; 'B'</li> </ul>
		Reservoir department: (DST/Well testing/Production)
		a. Nominate officer to witness testing
		Production department: (Production)
		a. Nominate officer to witness testing
4.	DDG	PSC/PF dept. forwards nomination for approval of DDG
	Prerequisites	a. Names of Nominated officers.
	Checks	<ul> <li>a. PSC/PF department will confirm the nominated person or nominate from other department in case manpower is not available with the technical departments</li> <li>b. Final nomination sheet</li> </ul>
6.	PSC/PF department	PSC/PF department shares the name of the DGH representative and his travel itinerary with the operator.



# 1.9. Submission of Format-A: Information of discovery

#### **Article of PSC:**

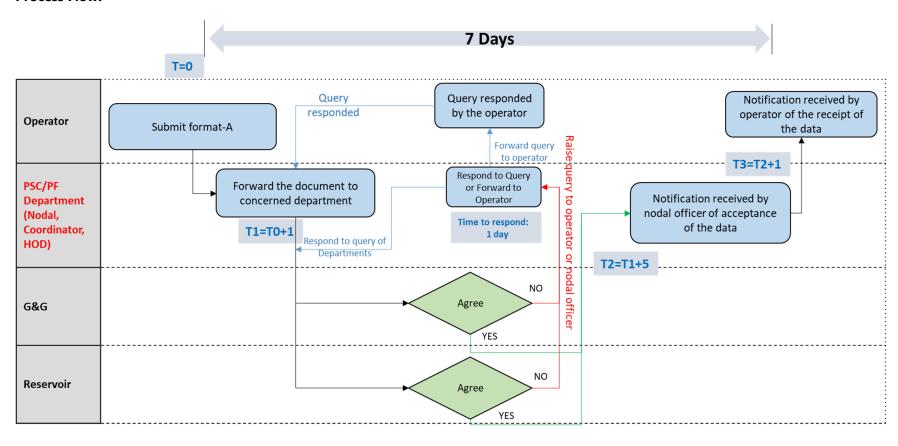
NELP 1 to 9:- Article 10

Pre NELP Exploration :- Article 9

Pre NELP discovered field: - Article 9 (Direct submission as part of development plan in Article 9-DEVELOPMENT AND PRODUCTION)

#	Department	Procedure
1	PSC/PF	Operator submits the "Format A - Information of discovery"
		documents. PSC/PF department receives documents
	Prerequisites	a. Format A - Information of discovery
	Checks	a. Format-A is duly filled and submitted timely as per contractual
		provisions
		b. Location, Well depth, Target depth are in line with the MCR
		c. Check if delay in notification of discovery
2	Technical	Technical departments receive files for examination.
	department	
	Prerequisites	a. Format A - Information of discovery
		b. Comments of PSC/PF department
	Checks	G&G department:
		a. Check if the said discovery has been witnessed by DGH
		representative [PSC Article 10.1, 10.2]
		b. Examine the following:
		Evaluation at the time of witness to the well testing
		DGH Witness Report
		c. Check the following:
		Interval of reservoir zone(s) and geological formation
		Nature of testing: Drill stem or conventional
		Type of well activation: self/ underbalanced/ artificial lift
		Fluid type and flow rate
		d. Assure that flow of oil/gas is surfaced
		e. Contractor to submit Format B to declare that the said
		hydrocarbon pool is of Potentially Commercial Interest
4.	DDG	Evaluated documents is put up for noting by PSC/PF dept.
	Prerequisites	Summary sheet comprising of Comments of Technical and of
		PSC/PF department.

#	Department	Procedure
	Checks	Noting of technical and PSC/PF department.
	Process Output	a. Acknowledgment of receipt of Format A to contractor
		b. PSC/PF department to ensure contractor informs all MC
		members and Govt. are notified of the discovery



## 1.10. Submission of Format-B: Potential Commercial Interest

#### **Article:**

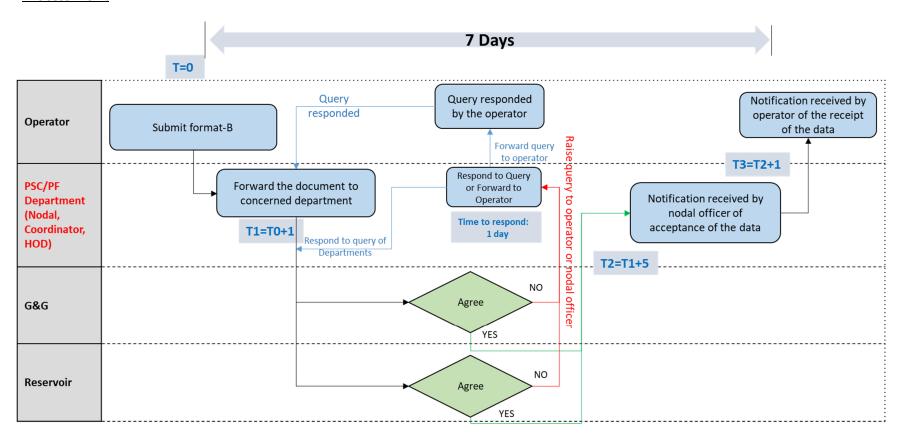
NELP 1 to 9:- Article 10

Pre NELP Exploration :- Article 9

Pre NELP discovered field: - Article 9 (Direct submission as part of development plan in Article 9-DEVELOPMENT AND PRODUCTION)

Department	Procedure
PSC/PF	Contractor submits the "Format B - Potential Commercial Interest". PSC/PF department to initiate the proposal.
Prerequisites	a. Format B - Potential Commercial Interest
Checks	<ul><li>a. Format A has been timely notified to MC members</li><li>b. Format-B is duly filled and submitted timely as per contractual provisions</li></ul>
Technical	Technical department receives Format-B and associated
department	documents from PSC/PF department.
Prerequisites	a. Format B - Potential Commercial Interest
	b. Comments of PSC/PF department
Checks	G&G department:
	a. Check if the said discovery has been notified and it's accepted
	through Format A [PSC Article 10.1, 10.2]
	b. Examine the following:
	<ul> <li>Evaluation at the time of witness to the well testing</li> <li>Evaluation of Format A</li> </ul>
	c. Check the following:
	Multi-bean study of flow at different bean/choke size with flow
	rate, choke and reservoir pressure
	Petrophysical analysis of the discovered reservoir(s)
	Reservoir parameters and petroleum in-place
	d. Check if additional test is carried out after submission of format-A
	e. Supplement with reservoir engineering data on fluid parameters
	and flow dynamics
	f. Assure that flow of oil/gas is sustainable and resource potential is commercially adequate
	g. Contractor may choose to submit an Appraisal Plan to better
	understand the extent and size of the discovery or judge to
	progress towards Commerciality Declaration/FDP
	PSC/PF Prerequisites Checks Technical department

#	Department	Procedure
		Reservoir department:  a. Reservoir studies if carried out b. Well testing results c. Commerciality of discovery to be ascertained and if the discovery merits appraisal
3	DDG	PSC/PF department receives the comments of technical
		departments and forwards the summary sheet for approval
	Prerequisites	Summary sheet comprising of comments of technical and PSC/PF
		department
	Checks	Noting of the evaluation of format-B by technical and PSC/PF
		department.
	Process	a. Acknowledgment of receipt of Format B - Potential Commercial
	Output	Interest to Contractor.
		b. PSC/PF department to ensure contractor informs all MC members
		and Govt. are notified.



# 1.11. Submission of Format-C: Commercial Discovery

#### **Article:**

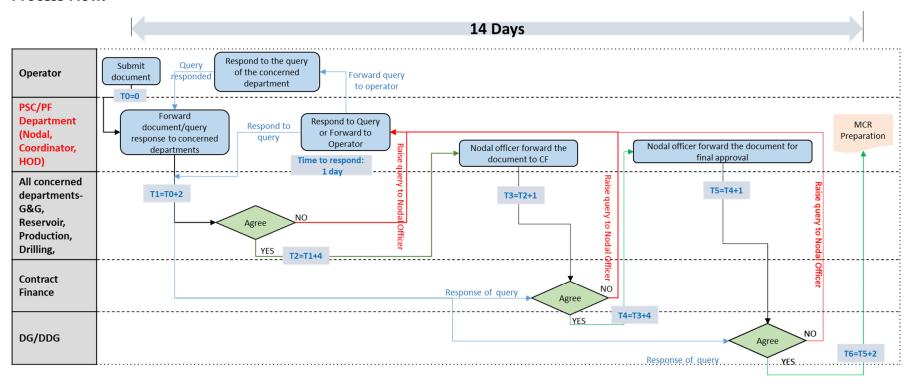
NELP 1 to 9:- Article 10 (For oil) & 21 (For Gas)

Pre NELP Exploration :- Article 9 (For oil) & 21 (For gas)

Pre NELP discovered field :- Article 9 (For oil) & 20 (For Gas) (Direct submission as part of development plan in Article 9-DEVELOPMENT AND PRODUCTION & Article 20-Natural Gas)

#	Department	Procedure
1	PSC/PF	Contractor submits the "Format C – Declaration of Commerciality". PSC/PF department to initiate proposal.
	Prerequisites	a. Format C - Declaration of Commerciality
	Checks	a. Format A has been timely notified to MC members
		b. Format B has been timely submitted and notified
		c. Format-C is duly filled and submitted timely as per contractual provisions
		d. PSC/PF group to be guided by DGH notified SOPs for DoC dated 20.10.2017
3.	Technical	Technical department receives files for examination.
	Prerequisites	a. Format C - Commercial Discovery
		b. Comments of PSC/PF department
	Checks	All technical departments (G&G/Drilling/Reservoir/Production)
		will be guided by DGH notified SOPs for DoC dated 20.10.2017
		G&G department:
		a. Relate to the Discovery, its approval status (Format B) and appraisal
		activities including appraisal drilling
		b. To assess the reservoirs which are discovered and declared to be
		commercially exploited under current market terms. Check if such
		submission is clear without any encumbrance
		c. Review field data sets:
		Drilling and Coring
		Logging and Testing
		d. Review interpretations on:
		Reservoir description
		<ul><li>Reservoir mapping</li><li>Reservoir Modeling</li></ul>

#	Department	Procedure
		<ul> <li>e. Review petro-physical parameters, methodologies used and results obtained for estimation of clay volume, porosity, saturation and permeability</li> <li>f. Well-level petro-physical summation of all reservoir zones/ units/ intervals and fluid contacts to estimate hydrocarbon pore thickness</li> <li>g. Define structural framework of reservoirs based on top surface, boundaries (faults/ facies terminations), fluid contacts and other internal discontinuities forming sectors/ compartments</li> <li>h. Check if reservoir is extending beyond the block boundary</li> <li>i. Check Volumetric methodology like 1D(linear), 2D(map) or 3D(model), in order to arrive at the estimated inplace</li> <li>j. Check how the 'static' reservoir parameters are integrated into inplace and how uncertainty (Low-Best-High)is addressed</li> <li>k. Final deliverables: <ul> <li>Inplace (Estimate, Category and its Distribution on map)</li> <li>Net pay or HCPV maps, suitably draped over structure</li> </ul> </li> <li>I. Forward data integration: <ul> <li>Dynamic modeling and future wells</li> <li>Production profile, boundary conditions and reserves</li> <li>Techno-economics</li> <li>Development and production strategy</li> </ul> </li> </ul>
3	CF	Technical department's comments are forwarded to CF by PSC/PF
	Prerequisites	Comments of concerned Technical departments.
	Checks	To be guided by DGH notified SOPs for DoC dated 20.10.2017
4.	DDG Prerequisites	PSC/PF department submits summary sheet comprising of comments of all technical departments & Contract finance  Summary sheet comprising of comments of technical, CF and PSC/PF department.
	Checks	Comments of technical, CF and PSC/PF department are noted
	Process O/P	Approval accorded for review by MC.
5	DG	PSC/PF department forwards the DDG approved summary sheet for approval of DG
	Prerequisites	Summary sheet for approval of DOC
	Checks	Recommendations from concerned departments and DDG.
6	PSC/PF	PSC/PF department initiates the process of preparation of MCR



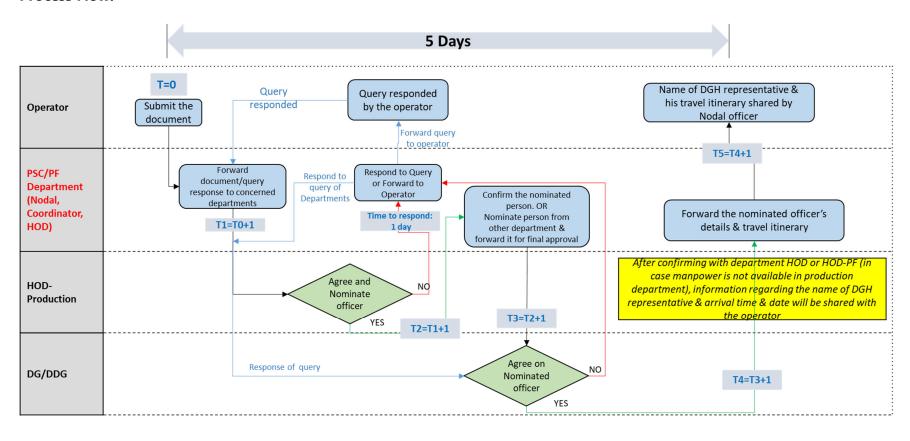
# 1.12. Calibration of flowmeters, witness custody transfer operations.

### **Article of PSC:**

NELP 1 to 9 :- Article 13

Pre NELP Exploration & Pre NELP discovered field :- Article 11

#	Department	Procedure
1.	PF	Operator submits proposal & required documents
	Prerequisites	a. Proposal by contractor for witnessing of calibration of flowmeters/witness custody transfer operations.
	Checks	a. The methodology w.r.t. 'Calibration of flowmeters, custody
		transfer operations' is MC approved
2.	Technical	b. The proposal should be in line with the MCR  Technical department receives all the documents for
۷.	rechnical	Technical department receives all the documents for examination.
	Prerequisites	<ul> <li>a. Proposal by contractor for witnessing of calibration of flowmeters/witness custody transfer operations along with supporting documents.</li> <li>b. MCR approval of 'Measurement of Petroleum'</li> </ul>
	Checks	Production department:
		a. Nominate officer to Calibration of flowmeters, witness custody transfers operations
		b. Familiarize with the approved MCR and standards to be followed during witnessing of the validation /calibration activities.
		c. Follow the checklist placed at Appendix-D, while exercise.
		d. On return, shall submit the copy of MOM signed during validation/calibration exercise along with report and all relevant documents.
		e. Examine submitted documents and reports by HOD and forward to PF dept. for record.
3.	DDG	PF dept. forwards nomination by Production/PF department for
		approval of DDG
	Prerequisites	a. Comments of Production and PF department.
	Checks	a. Approve nominated officers for witnessing calibration/ custody transfer operations.
4.	PF	Forward the names of nominated officers to Contractor and Production department.

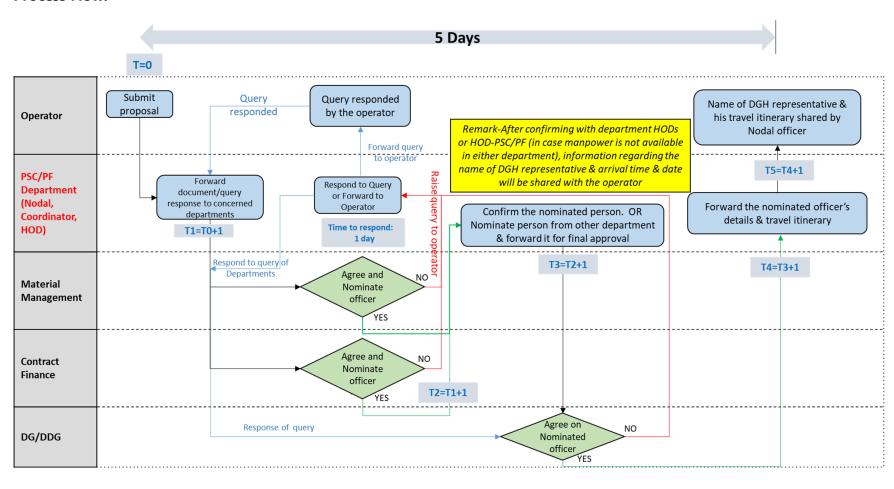


# 1.13. Inventory Report

### **Article of PSC:**

Pre-NELP Exploration, Pre-NELP field, NELP I-IX: Appendix C of PSC: Section 4

#	Department	Procedure
1.	PSC/PF	Contractor submits proposal & required documents for
		Inventory verification
	Prerequisites	a. Contractor's proposal along with supporting documents
	Checks	a. Block validity
		b. Status of previous inventory verifications
2.	Technical	PSC/PF department to forward the proposal to MM department
	department	
	Prerequisites	a. Contractor's proposal along with supporting documents
	Checks	Material Management (MM) department:
		a. Nominates a person from their department
		b. Nominated officer to submit a report on key findings during
		inventory verification.
3	Contract	PSC/PF department to forward the proposal to CF department
	Finance	
	Prerequisites	a. Contractor's proposal along with supporting documents
	Checks	a. Nominates a person from their department
		b. Nominated officer to submit a report on key findings during
		inventory verification.
4	DDG	PSC/PF dept. forwards nomination for approval of DDG
	Prerequisites	a. Comments and nominations from MM, CF and PSC/PF
		department
	Checks	a. Approve nominated officers for Inventory verification.
5	PSC/PF	Forward the names of nominated officers to Contractor, MM and
		CF department.



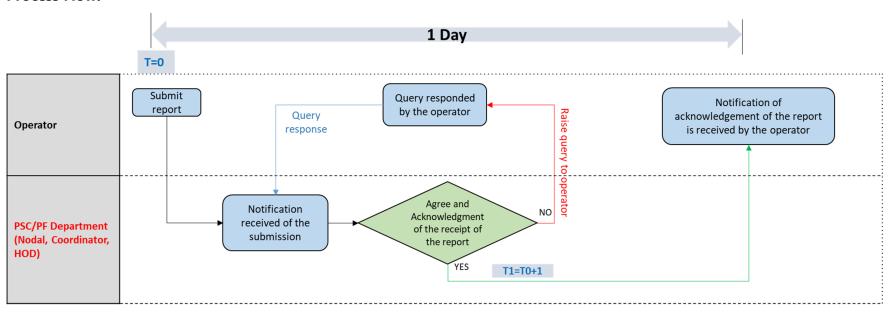
# 1.14. Local goods & service report

### **Article of PSC**

NELP I to IX & Pre NELP Exploration: Article 23

Pre NELP Field: Article 22

#	Department	Procedure
1.	PSC/PF	Operator submits the Local goods & service report
	Prerequisites	Local goods & service report
	Checks	<ul><li>a. Check that report is submitted within sixty (60) days after the end of each Financial Year</li><li>b. Report for record keeping in line with previous years local goods and service report.</li></ul>
2.	PSC/PF department	PSC/PF department sends acknowledgment of receipt of data to the Operator



# 1.15. Submission of Bank Guarantee + Legal Opinion & renewal and Revised Bank Guarantee

### Article of PSC -

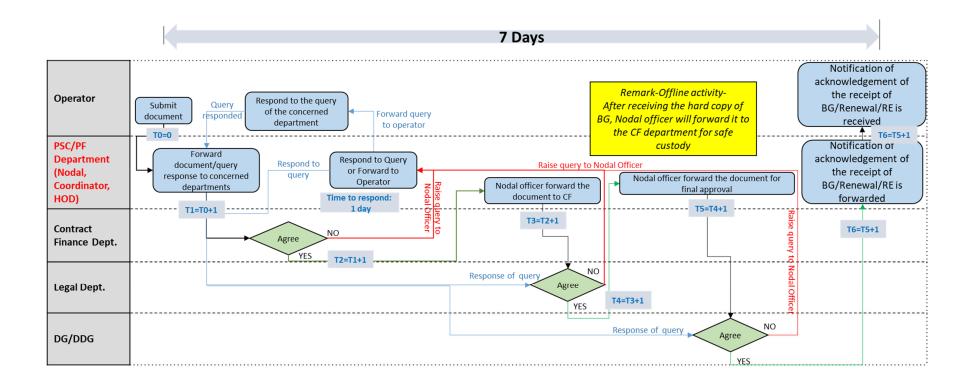
Pre NELP Exploration, NELP I to IX: Article 29

Pre NELP Field: Article 30

#	Department	Procedure
1.	PSC/PF	Operator submits the BG & required documents for review
	Prerequisites	a. Bank Guarantee or Revised Bank Guarantee     b. Submission of Legal Opinion
	Checks	a. Whether the submission of the Bank Guarantee is as per timelines stipulated by PSC
2.	Contract	b. Status of work programme and phase validity  PSC/PF department forwards the BG to Contract Finance for
۷.	Finance	examination
	Prerequisites	To be submitted by PSC/PF department:  a. Fact sheet, Status of work programme and block validity  b. MCR of WP&B for the respective FY for which BG has been submitted.
	Checks	<ul> <li>a. Block details are checked</li> <li>b. Examines and evaluates the Bank Guarantee for authenticity and adequacy as per the budget approved by the MC</li> <li>c. If the BG is found inadequate, the differential Bank Guarantee shall be computed.</li> </ul>
3.	Legal	Legal department receives the evaluated documents
	Prerequisites	Fact sheet of the block & CF comments
	Checks	<ul> <li>a. Format of BG is checked as per Proforma in Appendix G of PSC</li> <li>b. BG must be on Rs. 100 Stamp paper</li> <li>c. Following details in BG are checked - Validity, Claim period &amp; legal opinion which should be as per article 29.1C</li> <li>d. In case of revised BG amendment is checked which should be as per PSC contract.</li> </ul>
4.	DDG	PSC/PF department submits the evaluated BG and Legal Opinion
		and comments' summary sheet for approval of DDG.
	Prerequisites	Summary sheet with comments from PSC, CF and Legal departments.

### Standard Operating Procedures for PSC processes

#	Department	Procedure
	Checks	Approves the file taking cognizance of recommendations from the concerned departments
5.	PSC/PF	As per approval, intimation is made to the operator.



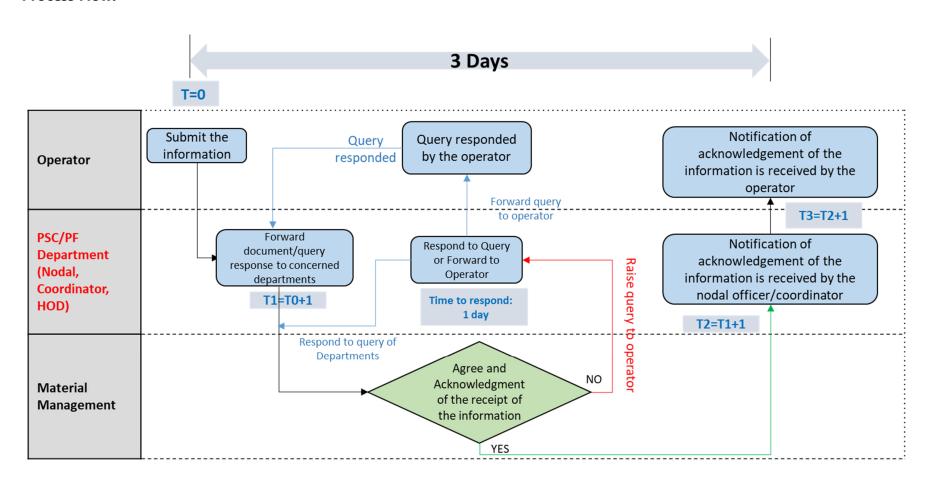
# 1.16. Information about hiring of vendors through tenders

### **Article of PSC:**

Pre NELP Exploration, NELP I to IX: Article 23

Pre NELP Field: Article 22

#	Actor	Process Flow Step
1	PSC/PF	Contractor submits the required documents of Information
		about hiring of vendors through tenders
	Prerequisites	Proposal of contractor with supporting documents
	Checks	a. Block validity
		b. Proposal is in line with Article 8 and Appendix-F of PSC
2	Materials	PSC/PF submits Contractor's proposal for examination.
	Management	
	Prerequisites	a. Contractor's proposal
		b. Block status/Fact sheet
	Checks	a. Examines the documents as per procedures laid out in Article-8
		and Appendix-F of PSC
		b. Deviations, if any, must be pointed out and requisite clarification
		be sought.
3	PSC/PF	PSC/PF department notes the comments from MM department.
		Deviation if any may be brought up in MC for approval.



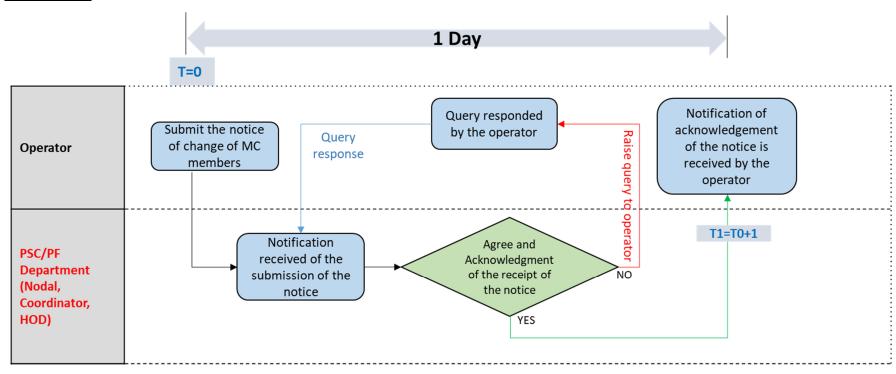
# 1.17. Change of MC members

### **Article of PSC**

Pre NELP Exploration, NELP I to IX: Article 6

Pre NELP Field: Article 5

#	Actor	Process Flow Step
1.	PSC/PF	Contractor notifies change of MC members to DGH
	Prerequisite	a. Contractors' previous MC members notified to DGH
		b. Present proposal indicating change in MC members
	Checks	a. Name, Designation and Contact details of nominated MC members
		b. Records the change in MC members
3.	PSC/PF	Noted by PSC/PF department and acknowledges receipt of notice
		of change in MC members



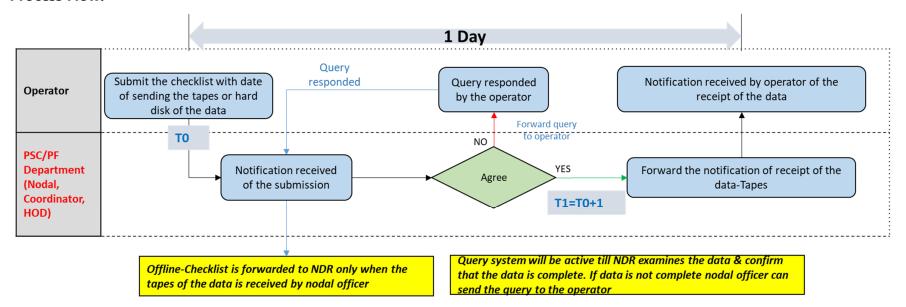
### 1.18. Submission of G&G data

### **Article of PSC:**

Pre NELP Exploration, NELP I to IX: Article 26

Pre NELP Field: Article 25

#	Department	Procedures
1.	PSC/PF	Operator submits the data to DGH
	Prerequisites	Data submission as per prevalent NDR data submission guidelines
	Checks	a. Status of block validity
		b. Status of MWP vs. Data submitted w.r.t work completion.
2.	NDR	NDR department receives the data along with PSC comments
	Prerequisites	a. Fact sheet of the block
		b. Status of activities completed
	Checks	a. Authenticity of the data tapes
		b. QC of seismic data
		c. Well completion reports, log data and other associated data that
		must have been submitted as per PSC.
3.	PSC/PF	When all the data has been submitted, vetted and confirmed from
		NDR, the PSC/PF section records the same in summary sheet.



# 1.19. Submission of Insurance & Indemnity

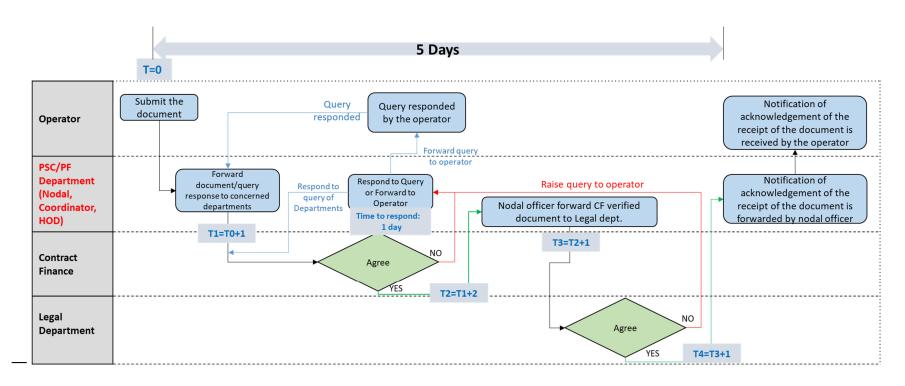
### **Article of PSC:**

NELP I to IX & Pre NELP Exploration: Article 24

Pre NELP Field: Article 23

### **Standard Operating Procedure:**

#	Department	Procedure
1.	PF/PSC	Operator submits Insurance & Indemnity
	Prerequisites	Documents of Insurance and Indemnity
	Checks	a) Block validity
		b) Status of previous indemnifications to Government
2.	Contract	Contract finance receives all the files for their examination.
	finance	
	Prerequisites	Documents of Insurance and Indemnity
	Checks	Contract Finance verifies the following:
		a. Insurance amount
3	Legal	Legal dept. receives files for examination.
	Prerequisites	a. Documents of Insurance and Indemnity
		b. Comments from Contract Finance dept.
	Checks	Legal department verifies the following:
		a. Indemnification of Government
4	PSC/PF	Based on CF and Legal departments' comments, PSC/PF department sends acknowledgement of the documents to the operator



# 1.20. Submission of operating agreement

### Article of PSC:

NELP I to IX & Pre NELP Exploration: Article 7

Pre NELP field: Article 6

#	Department	Process Flow Step
1.	PSC/PF	Operator submits Joint Operating Agreement (JOA), Operating
		Committee (OC) to DGH
	Prerequisites	JOA, OC
	Checks	a) Signed JOA
		b) PI assignment is in line with PSC
2.	PSC/PF	PSC/PF department sends acknowledgment of receipt of JOA/OC
		to the Operator

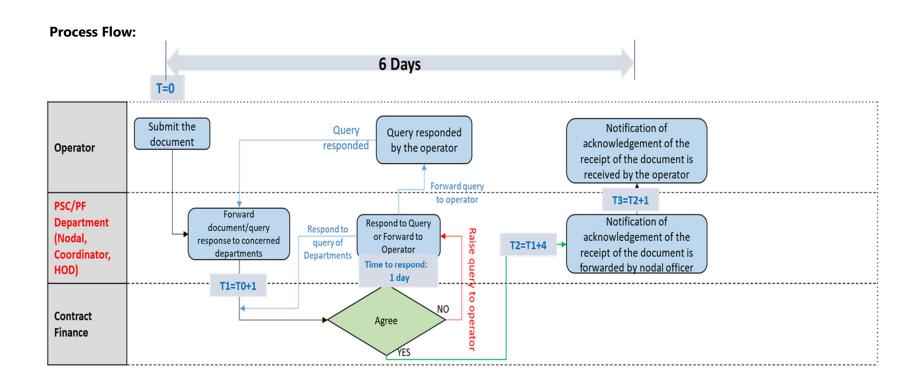
#### **Process Flow:** 1 Day T=0 Submit the Notification of Query responded Raise query to operator acknowledgement of the receipt agreement by the operator Query of the agreement is received by Operator response the operator Agree and Notification Acknowledgment PSC/PF Department received of the of the receipt of submission (Nodal, the report Coordinator, HOD) YES T1=T0+1

# 1.21. Submission of accounting procedure

### Article

NELP I to IX, Pre NELP Exploration & Pre NELP field: PSC Appendix- C section 1

#	Department	Procedure
1	PSC/PF	Accounting procedure is submitted by Operator
	Prerequisites	Proposal of accounting procedure
	Checks	Block status/validity
2	Contract	Contract Finance receives all the files for their examination from
	Finance	PSC/PF dept.
	Prerequisites	a. Documents of accounting procedure
		b. Any additional documents for reference
	Checks	Examines the accounting procedure as per the contract and notes the
		same.
3	PSC/PF	PSC/PF department receives comments from Contract Finance
		dept. and sends acknowledgment of receipt of agreement to the
		Operator.



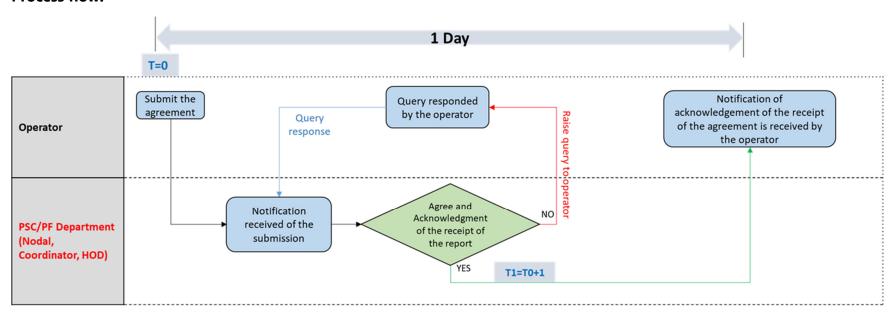
# 1.22. Environment Impact Assessment report 1 & 2

### **Article of PSC:**

NELP I to IX: Article 14

Pre NELP Exploration & Pre NELP Field:- Article 12

#	Department	Procedure
1	PSC/PF	Environment Impact Assessment is submitted by Operator
	Prerequisites	Environment Impact Assessment (EIA) report
	Checks	Block status/validity
2	Environment	PSC/PF submits the EIA report to Environment dept. for
		noting and review.
	Prerequisites	a. Comments of PSC/PF department
		b. EIA report by operator
	Checks	Report submitted by the operator to be reviewed and noted
3	PSC/PF	PSC/PF department sends acknowledgment of receipt of the
		report to the Operator



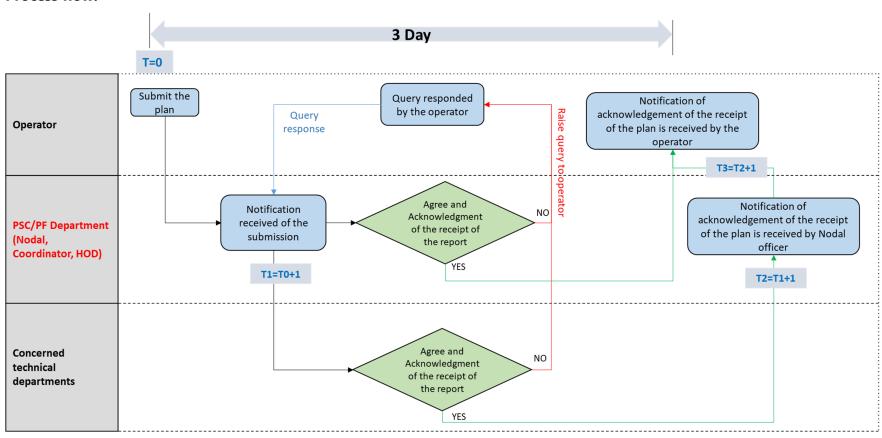
# 1.23. Contingency Plan

### **Article of PSC:**

NELP I to IX: Article 14

Pre-NELP Exploration & Pre-NELP field :- Article 12

#	Department	Procedure
1.	PSC	Operator submits the contingency plan
	Prerequisites	Contingency Plan
	Checks	a) Block status/validity
		b) Contingency Plan to be submitted as per PSC timelines
2.	Technical	PSC/PF department to forward the contingency plan to concerned
	department	technical department (Production/ Drilling/ Environment) for
		examination
	Prerequisites	a. Contingency Plan for approval
		b. Any additional documents for reference
	Checks	Examines contingency plan for any concern as per the article 14 of PSC
		contract
3.	PSC	Based on comments of concerned technical department PSC/PF
		department receives the examined document and sends
		acknowledgment of receipt of the plan to the Operator



# 1.24. Submission of Unit Development Plan

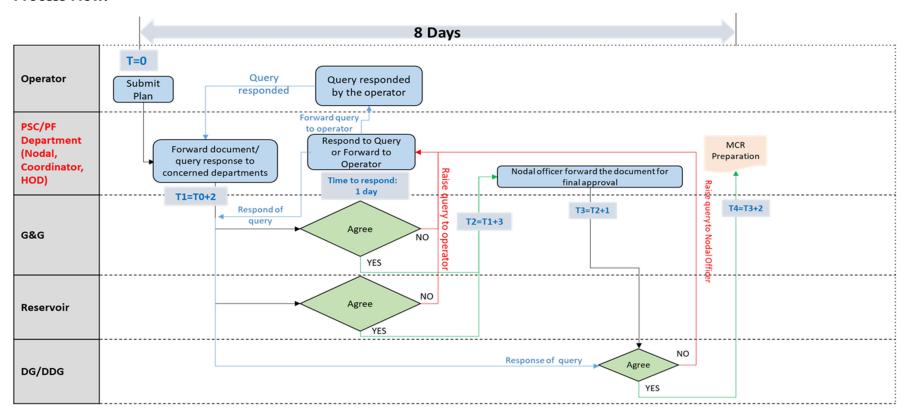
### **Article of PSC**;

NELP I to IX: Article 12

Pre-NELP Exploration & Pre-NELP Field: Article 10

#	Department	Procedure
1.	PSC/PF	Operator submits OC approved unit development plan along with supporting documents
	Prerequisites	a. PML grant application, or     b. PML re-grant application with RFDP
	Checks	<ul> <li>a. Block status/validity</li> <li>b. Whether Joint technical study (agreed by both parties) has been done by both the concerned parties for optimal unit development.</li> <li>If yes, report to be submitted. If no, then third party assessment to be done and its report to be submitted.</li> </ul>
2.	Technical	Technical department's receives all the files for their examination.
	Prerequisites	<ul> <li>a. Unit Development Plan.</li> <li>b. Report of Joint technical study or third party assessment as the case may be</li> <li>c. Comments from PSC/PF department.</li> <li>d. Any additional documents for reference</li> </ul>
	Checks	G&G Department
		<ul><li>a. Examine STOIIP calculation and areal distribution of the reservoir.     Ascertain the reserves assessed by the contractor.</li><li>b. Examine the reservoir continuity based on logs, well completion report</li></ul>
		Reservoir Department
		<ul> <li>a. Examine the reserves calculated under each block/lease area for optimal unit development.</li> <li>b. Review the Field development strategy based on reserves calculated.</li> <li>c. Review development strategy based on planned wells, production profile envisaged and efficiency in reservoir management.</li> </ul>
3.	DDG	PSC/PF department prepares the summary sheet and forwards the same for approval of DDG

#	Department	Procedure
	Prerequisites	a. Comments from PSC/PF department.
		b. Comments from G&G department.
		c. Comments from Reservoir department.
		d. Reports – Joint technical study/ third party assessment
		e. Summary sheet
	Checks	Recommendations from concerned departments
4	DG	PSC/PF department forwards the summary sheet for approval of
		DG
	Prerequisites	Summary sheet
	Checks	a. Recomendations from all concerned departments
		b. Approval of DDG
5	PSC/PF	PSC/PF department prepares the MCR for approval of Unit
		development plan.



# 1.25. Submission of Field Development Plan

### **Article of PSC:**

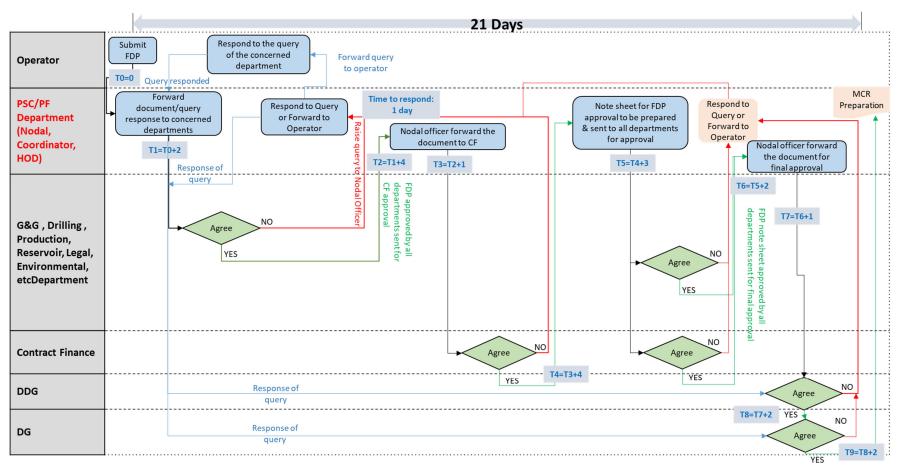
NELP I to IX: Article 10

Pre NELP Exploration & Pre NELP Field :- Article 9

#	Department	Procedure
1	PSC/PF	Operator submits FDP along with supporting documents for approval
	Prerequisites	Field Development Plan & supporting documents
	Checks	<ul> <li>a) Block status/validity</li> <li>b) Whether the FDP has been submitted within the stipulated PSC timelines</li> <li>c) PSC/PF group to be guided by DGH notified SOPs for FDP dated 20.10.2017</li> </ul>
2	Technical	PSC/PF forwards its comments to concerned technical dept. for
	dept.	review.
	Prerequisites	a. Field Development Plan
		b. Any additional documents for reference
	Checks	<b>G&amp;G department:</b> Following procedure is followed-
		a. Relate to the DoC and status of any appraisal activities including
		appraisal drilling, subsequent to review of DoC
		b. Review 'changes' from DoC in terms of New data sets, New/
		Revised interpretation, Estimate of inplace, Reserves, techno- economics and exploitation strategies
		c. Check through DoC work flows and summarize the revised results at relevant stages
		d. update all stage gates as listed under review of doc
		e. Review parameter uncertainties in interpretations justifying the
		Low-Best-High estimates
		f. Review development risks if any foreseen and mitigation strategies thereof
		g. Define in-place and corresponding reserves polygons on map and mark up 'Development Area'
		h. Sum up static volume and see its distribution over Net Pay/ Pore volume map draped over reservoir top

#	Department	Procedure
		<ul> <li>i. Connect to forward disciplines for: Dynamic modeling,         Development locations, Production profile, Production facilities,         Techno-economics</li> <li>All technical departments to be guided as per approved SOP for</li> </ul>
		review of FDP dated 20.10.2017
3.	Contract	FDP approved by technical department to be forwarded to CF
	Finance	dept. by PSC/PF dept.
	Prerequisites	Comments from Technical Department
	Checks	Examines and evaluates the documents
4	DDG	PSC/PF department prepares the summary sheet and forwards the same for approval of DDG
	Prerequisites	Summary sheet for approval of FDP
	Checks	Recommendations from concerned departments
5	DG	PSC/PF department forwards the DDG approved summary sheet for approval of DG
	Prerequisites	Summary sheet for approval of FDP
	Checks	Recommendations from concerned departments and DDG.
6	PSC/PF	PSC/PF department prepares the MCR after getting approved note sheet from all concerned departments

### Process Flow: DDG will have the option of either forwarding FDP to DG or it can be forwarded to PSC/PF dept for MCR preparation

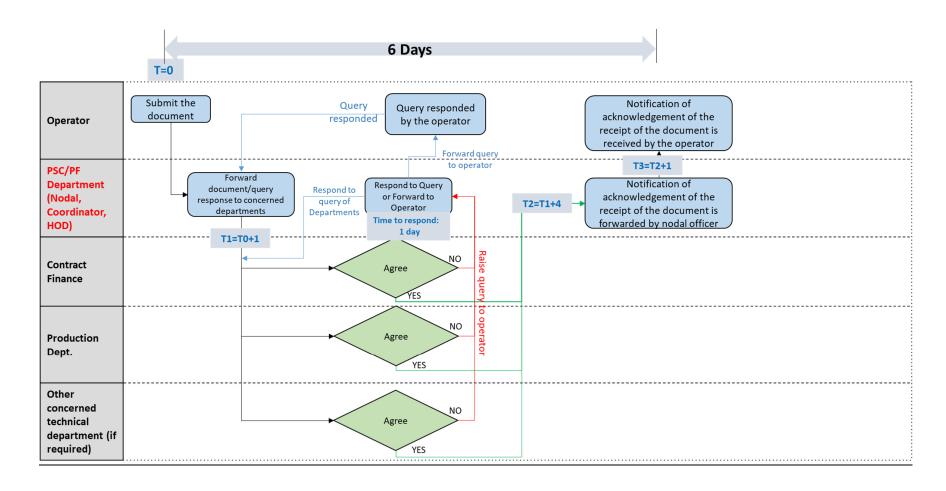


# 1.26. Value of Production and Pricing Statement

### **Article of PSC:**

NELP I to IX, Pre NELP Exploration & Pre NELP Field: PSC Appendix- C section 6

#	Department	Procedure
1	PF	PF department receives the statement.
	Prerequisites	Value of Production and Pricing Statement
	Checks	Block status/validity
2.	Production	PF department forwards the statement to Production department
	Prerequisites	a. Value of Production and Pricing Statement
		b. Any additional documents for reference or comments by PF
	Checks	Record the production statement submitted by operator
3	Contract	PF department forwards the statement to Contract Finance dept.
	Finance	
	Prerequisites	a. Value of Production and Pricing Statement
		b. Comments of PF department
		c. Comments of Production department
	Checks	Pricing is checked as per prevailing market conditions according to
		which royalty calculation is checked.
4	PSC/PF	PSC/PF department sends the acknowledgement of the receipt of
		the document.

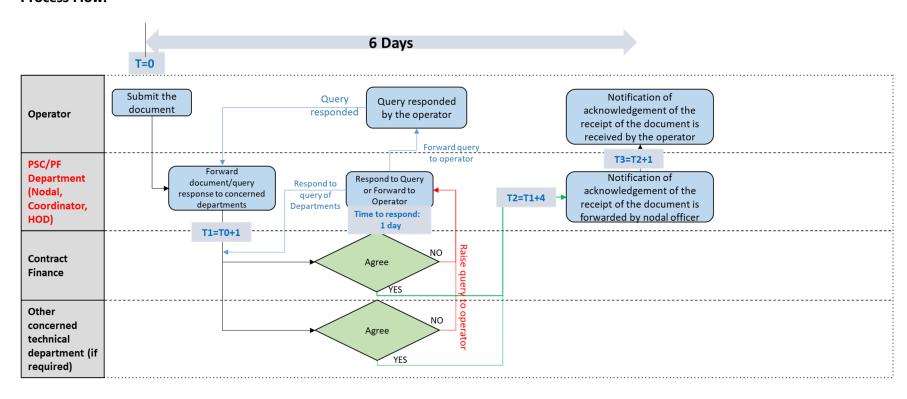


# 1.27. Quarterly Reports

### **Article of PSC:**

NELP I to IX, Pre NELP Exploration & Pre NELP Field: PSC Appendix- C section 7, 8 & 9

#	Department	Procedure
1	PSC/PF	Operator submits quarterly reports which are received by PSC/PF
		department
	Prerequisites	Quarterly Reports
	Checks	a) Block status/validity
		b) Whether the Quarterly Expenditure is in line with the MC approved
		Budget
2	Contract	Contract Finance department receives all the statement for their
	Finance	examination.
	Prerequisites	a. Quarterly Reports
		b. Any additional documents for reference
	Checks	a. Check actual costs incurred against previously submitted budgeted
		costs
		b. Check the calculations used for profit sharing
3.	PSC/PF	PSC/PF department sends the acknowledgement of the receipt of
		the quarterly reports.

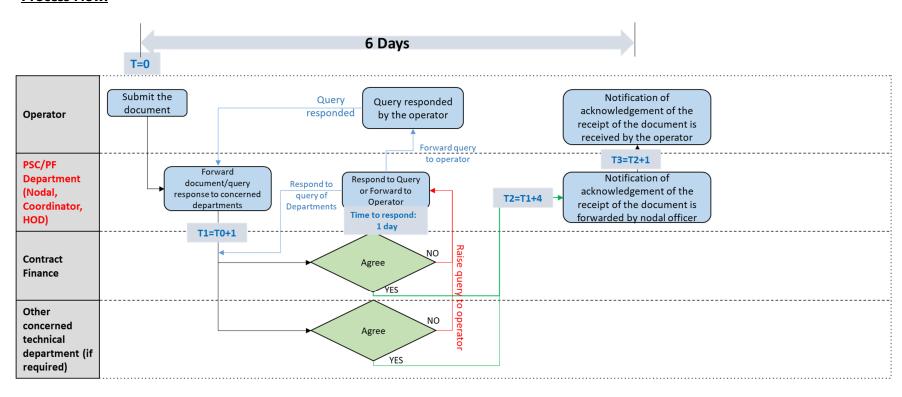


# 1.28. Cost and Profit Petroleum Calculations

## **Article of PSC:**

Cost Petroleum Calculations	Profit Petroleum Calculations
NELP I to IX: Article 15	NELP I to IX: Article 16
Pre-NELP Exploration: Article 14	Pre-NELP Exploration: Article 15
Pre-NELP Field: Article 13	Pre-NELP Field: Article 14

#	Department	Procedure
1.	PSC/PF	Operator submits the Cost & Profit Calculation as per the contract
	Prerequisites	a. Cost/Profit Petroleum Calculations
		b. Supporting Documents (If required)
	Checks	a. Block status/validity
2.	Contract	PSC/PF department submits the files to Contract Finance dept. for
	Finance	examination
	Prerequisites	a. Cost/Profit Petroleum Calculations
		b. Supporting Documents (If required)
	Checks	a. Examines and evaluates the Cost/Profit Petroleum Calculations
		based on the audited reports & approved budgets.
3.	PSC/PF	PSC/PF department receives the evaluated documents and sends
		acknowledgment of receipt of calculations to the Operator



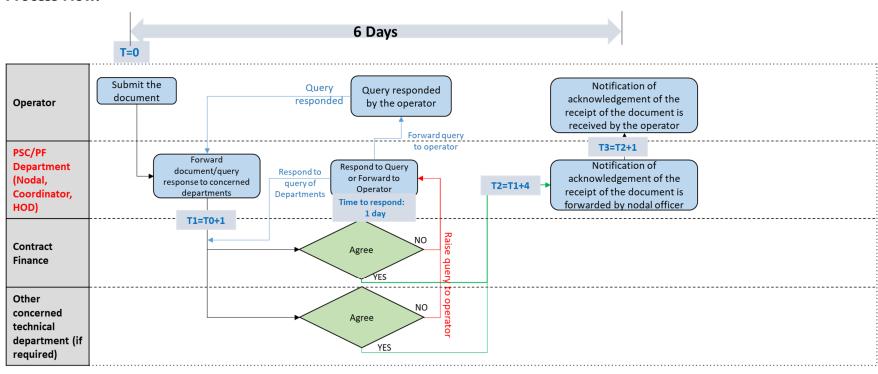
# 1.29. Annual statements

# **Article of PSC:**

NELP I to IX: PSC Appendix section 11 & 12

Pre-NELP Exploration & Pre-NELP Field: - PSC Appendix section 10 & 11

#	Department	Procedure
1.	PSC/PF	Contractor submits the Annual statements
	Prerequisites	a. End of Year Statement
		b. Budget Statement
	Checks	Block status/validity
		Whether the Annual Expenditure is in line with the MC approved
		Budget
2.	Contract	Contract Finance receives annual statements from PSC/PF Dept.
	Finance	
	Prerequisites	a. Annual Reports
		b. Any additional documents for reference
		c. Comments from PSC/PF dept.
	Checks	Examines and evaluates the Annual Reports for
		a. Budgeted/planned vis a vis actual activtities and costs
		b. Activities carried out without approval from Management
		committee (MC)
3.	PSC/PF	PSC/PF department receives the evaluated documents and sends
		acknowledgment of receipt of statements to the Operator



# **Annual Statement (Contd.)**

# > Audited accounts

# **Article of PSC:**

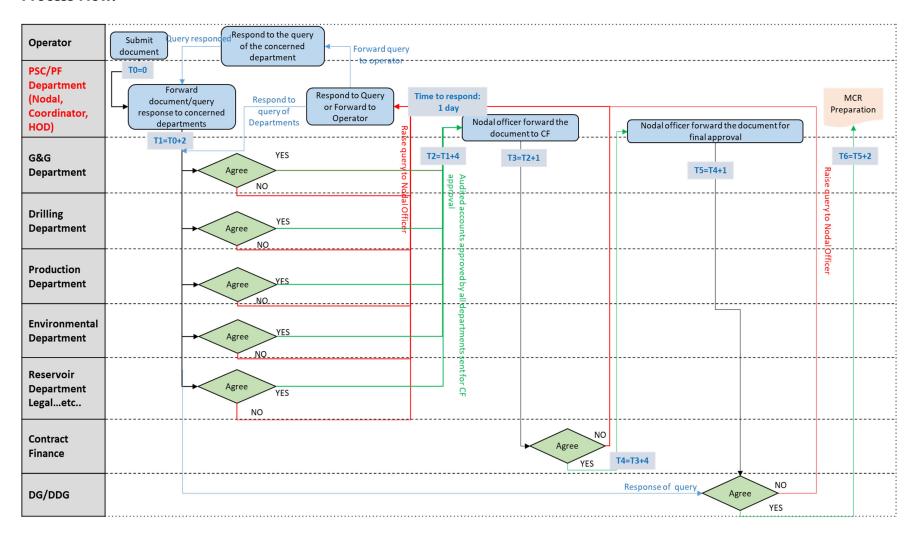
NELP I to IX & Pre-NELP Exploration: Article 25

Pre-NELP Field: Article 24

#	Department	Procedure
1.	PSC/PF	Operator submits audited accounts for approval
	Prerequisites	a. OC approved audit statements submitted by September
	Checks	a. Block status/validity
		b. MCR for appointment of auditor for the relevant Financial Year
		c. OC approval
		d. Variance Statement (Budgeted versus Actual) of the relevant
		Financial Year, with justifications
2.	Technical	Technical department receives all the documents for
		examination.
	Prerequisites	a. Audited Accounts
		b. Fact-sheet of the block.
		c. Brief write-up on the G&G/Drilling/Production Work Programme
		in the Audited Accounts proposal like number of wells, Type of
		well/s (Exploratory, Appraisal, Development), Target Depth.
		d. Approved Work Programme for the concerned Financial Year
		e. Technical details of the wells drilled during the FY may be
		provided in the Format 3B.
		f. Variance statement between Work Programme in the Audited
		Accounts and Approved Work Programme in tabular form, and
		justification for same may be provided.

#	Department	Procedure
	Checks	G&G:
		a. Relate to MC-approved BE and RE with the Actual Work performed
		b. Bring out G&G activities which were executed without any formal
		approval and seek reasons thereof
		c. Bring out G&G activities which were executed at higher costs than approved and seek reasons thereof
		d. Ask 'basis' of activities accomplished/ proposed along with all
		key survey/well data (survey API quantum and coverage, well
		depths) and analysis, tables, maps, models and reports  e. List out common reasoning like delayed implementation,
		prolonged operation, market price escalation, operational
		circumstances, force majeure etc.
		f. Sum up reviews or raise queries seeking justifications whenever
		approval seen at variance with actual
		Drilling:
		a. Actual Drilling Work Programme carried out during the FY may
		be checked vis-à-vis the Drilling Work Programme in the Audited Accounts. In case of any discrepancy query may be sought from
		the operator until satisfactory replies are provided.
		b. Variance between Drilling Work Programme in the Audited
		Accounts and Approved Work Programme in tabular form, and
		justification for same may be checked from technical point of
		view. If variance and justification for same are found to be in order from technical point of view, then the Audited Accounts
		may be agreed from Drilling point of view.
		c. Otherwise, query may be sought from the operator until
		satisfactory replies are provided; then the Audited Accounts may
		be agreed from Drilling point of view.  d. In case replies/ satisfactory replies are not provided by the
		operator the drilling Work Programme of the Audited Accounts
		may NOT be agreed from drilling point of view and the same
		may be intimated to PSC, PF or concerned section for further
		necessary action.  e. Additionally, in case of Audited Accounts proposals where cost
		e. Additionally, in case of Audited Accounts proposals where cost (cumulative total) of any Exploratory well has exceeded
		Appendix-H cost, operator is required to provide variance
		analysis, variance of technical details of the well along with cost
		implications and detailed justifications for the same together

#	Department	Procedure
		with documentary evidence(IADC reports etc) to substantiate their claims. In case the same are found to be in order from technical point of view, then the Audited Accounts may be agreed from Drilling point of view  f. Otherwise, query may be sought from the operator for satisfactory reply; then the Audited Accounts may be agreed from Drilling point of view  g. In case replies/ satisfactory replies are not provided by the operator, the Audited Accounts may NOT be agreed from drilling point of view and the same may be intimated to PSC for further necessary action.
3.	Contract	PSC/PF dept. forwards technically examined audited accounts
	Finance	to contract finance
	Prerequisites	a. Comments from technical departments
	<u> </u>	b. Variance statement
	Checks	a. Examines the Audited Accounts and evaluated based on comments and recommendations from the technical
		departments
		b. Budgeted/planned vis a vis actual activtities and costs
		c. Checks if any cost is included in the statement which are not MC
		approved.
4.	DDG	PSC/PF dept. forwards technical & CF dept. examined accounts
		to DDG for approval
	Prerequisites	b. Comments from technical & CF department.
	Checks	a. Comments from technical departments
		b. Comments from CF department
		c. Summary sheet
5.	PSC/PF	PSC/PF department prepares the MCR



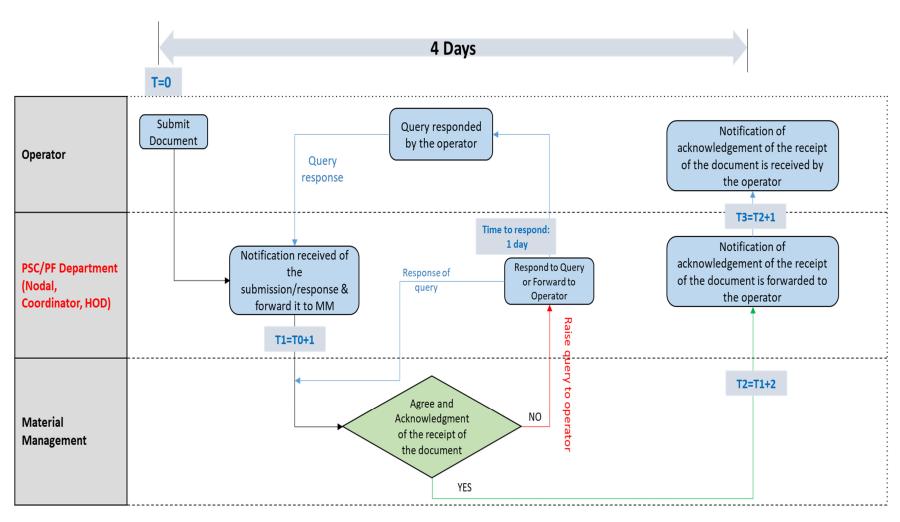
# 1.30. Vendor qualification Criteria

## **Article of PSC:**

NELP I to IX: Appendix F Section 4

Pre-NELP Exploration & Pre-NELP Field: Article 7 (General rights & Obligations of the parties-MC to be informed)

#	Department	Procedure
1.	PSC/PF	Contractor submits vendor qualification criteria & required documents for verification
	Prerequisites	Vendor qualification criteria
	Checks	Block status/validity
2	Materials Management	PSC/PF submits Contractor's proposal for examination.
	Prerequisites	Contractor's proposal for Vendor Qualification
	Checks	To examine the documents as per procedures laid out in Article-7 /Appendix-F of PSC  Deviations, if any, must be pointed out and requisite clarification be sought.
3	PSC/PF	PSC/PF department sends acknowledgment of receipt of document to the Operator



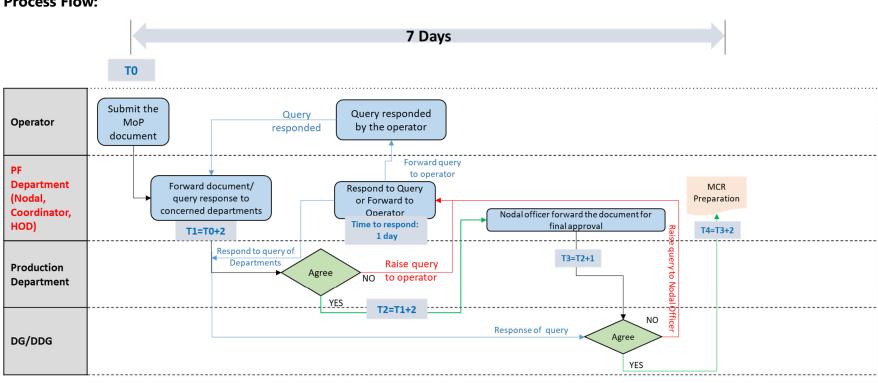
# 1.31. Measurement of Petroleum

## **Article of PSC:**

NELP I to IX: Article 13

Pre NELP Exploration & Pre NELP Field: Article 11

#	Department	Procedure
1.	PF	Operator submits the document for approval
	Prerequisites	Measurement of Petroleum documents
	Checks	a) Block Status/validity
		b) Status of 'Measurement of Petroleum' for the previous years
2.	Production	PF forwards the proposal to Production department's for
		examination.
	Prerequisites	a. Measurement of Petroleum documents
		b. Any additional documents for reference
	Checks	To be guided by internally formulated SOPs for Measurement of
		Petroleum and subsequent amendments made from time to time.
3.	DDG	PSC/PF department prepares the summary sheet and forwards the
		same for approval of DDG
	Prerequisites	Summary sheet for approval
	Checks	Comments of Production department.
4.	PSC/PF	PSC/PF department prepares MCR



# 1.32. LD/Cost of Unfinished work programme

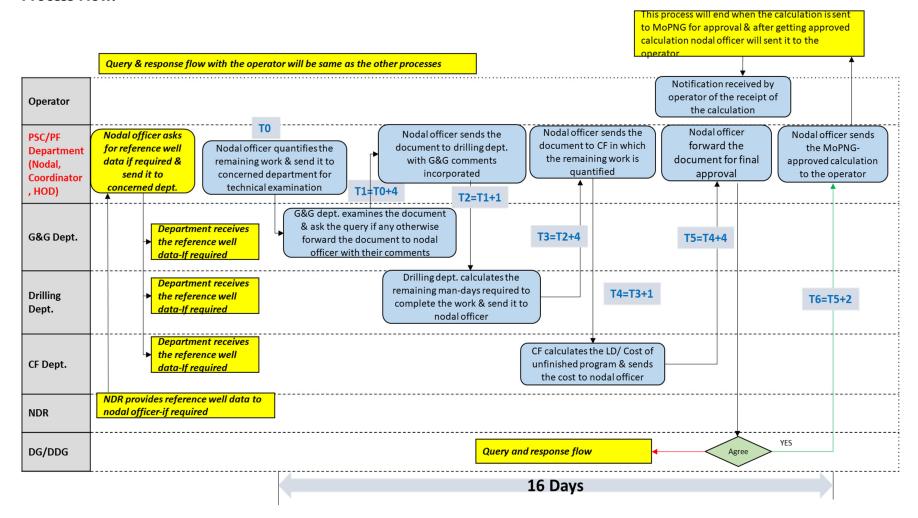
## **Article of PSC:**

NELP I to IX: Article 5

Pre NELP Exploration :- Article 4

**Procedure: Process is initiated by Nodal officer** 

#	Department	Procedure
1.	PSC/PF	Nodal officer quantifies the remaining work & send it to concerned departments for technical examination
	Prerequisites	<ul><li>a. Work Committed by the contractor as per MC approval</li><li>b. Actual work completed by the contractor</li></ul>
	Checks	<ul><li>a) Block status/validity</li><li>b) MWP status</li><li>c) On the basis of actual vs committed work, nodal officer to quantify the remaining work.</li></ul>
2.	Technical	PSC/PF department forwards the remaining work for examination
	Prerequisites	To be submitted by PSC/PF department:  a. Probable reference wells from NDR  b. Quantum of unfinished minimum work programme i.e. meterage in case of completely undrilled well or any shortfall  c. Quantum of unfinished minimum work programme i.e Exploration- 2D & 3D  d. Technical data of the well under consideration with GTO, WCR, bit records (in standard format)  To be guided by Executive Committee approved SOPs dated
	_	06.05.2019
3.	Contract Finance	CF department receives the technically evaluated documents from PSC/PF Dept.
	Prerequisites	Technically evaluated remaining work programme
	Checks	CF dept. calculates cost as per technically evaluated document provided. To be guided by Executive Committee approved SOPs dated 06.05.2019
4.	DDG	PSC/PF dept. prepares the summary sheet for approval of DDG.
	Prerequisites	Summary sheet with comments from PSC, technical dept. & CF
	Checks	Recommendations of technical departments and CF
5.	PSC/PF	PSC/PF department submits the COUWP/LD calculated to MoP&NG for approval.



# 1.33. Assignment/Transfer of Participating Interest

# **Article of PSC:**

NELP 1 to 9 & Pre NELP Exploration:- Article 28

Pre NELP discovered field :- Article 27

# **Standard Operating Procedure:**

#	Department	Procedure
1.	PF/PSC	Operator submits the document
	Prerequisites	Documents of assignement/Transfer of Participating Interest as per the format prescribed by DGH.
	Checks	<ul><li>a. Proposal for assignment/transfer of PI in DGH Format</li><li>b. OC approval</li></ul>
2.	Contract finance	Contract finance receives all the files for their examination.
	Prerequisites	Documents of assignement/transfer of participating interest
	Checks	Contract Finance verifies the following:
		c. Net worth of the proposed assignee or transferee
		a. Bank guarantee amount
3	Legal	Legal dept. receives files for examination.
	Prerequisites	a. Documents of assignement/Transfer of participating interest
		b. Comments from Contract Finance dept.
	Checks	Legal department verifies the following:
		a. Legal opinion of the Bank Guarantee
4.	DDG	PSC/PF department prepares the summary sheet for approval of DDG.
	Prerequisites	Summary sheet with comments from PSC, CF & Legal dept.
	Checks	Recommendations of CF & legal dept.
5.	PSC/PF	PSC/PF department forwards the acknowledgement of the document

# **Process Flow: Assignment/Transfer of Interest**

