Technic	al and Functional Requirement for Retail Automation
Sr. No	Technical and Functional Requirement
1 11	Broad Requirements:
1.1	Three different areas & needs to be addressed through Retail Automation
1.1.1	Customers: a. Quality & Quantity of Delivery assurance by electronically monitoring tank stock & dispenser deliveries and keeping logs and generating alerts. b.Seamless integration of billing with fuelling.Bill generation takes place only after fuelling. Auto SMS (e-bill) for transactions. c.System generated quick bills for each transaction. No scope for manual billing and associated frauds. Customer can track back any transaction. b. Improvement in Forecourt Efficiency: # Reduced DSM s response time # Reduced payment transaction time for Customers who pay by Credit, Debit & BPCL Loyalty cards. # All the methods of payments including bank cards, BPCL loyalty cards, etc to be enabled in the forecourt.
1.1.2	Dealers: a.Identification of DSM for every transaction. Any DSM should be able to operate any dispensing unit and yet cash/payment accountability should happen seamless through Automation system. It should be possible to dedicate Fuelling Position (FP) to DSM for MPD operation. b. Fast and easy transactions using credit, debit & BPCL Loyalty Cards c. Credit Customers account and periodic billing including useful MIS about buying History/behavior. d. Enable monitoring of Sales, stock loss/gains, Customer reports, DSM utilisation & operation management, etc. through the Automation system.
1.1.3	 BPCL: a.Remote site monitoring and data analysis of stock and sales enabling better network management. b.Centralised monitoring through Head office servers and MIS for performance monitoring and bussiness advantages. c. leveraging technology for Q&Q assurance at the ROs including stock and sales reconciliations. d.Stock replenishments through Auto SMS and Email to dispatching depot from RO Automation System linked with Minimum order level. e. Asset utilization and peak hours statistics. f.Remote price updation through Head Office Application. g.Integration with SAP for inventory data comparison, RSP upload and planning dispatches-SPADE (Synching PDP & automation for delivery enablement). h. Local campaigns to suit Customers profile. Local Campaigns shall be performed from Cash Memos of the EDCs. The Header & Footer of the Cash Memo to be editable (within the text size limitation of the printing device) for messages like Happy Holi etc i.System ready for Vehicle tracking and fuel management system for fleet customers.
2	Basic Features of Retail Automation Effective monitoring of Quality and Quantity assurance to the sustamers
2,1	Enective monitoring of Quanty and Quantity assurance to the customers.
2.2	Enhancement of efficiency in forecourt operations with effective control of forecourt equipment like ATG system, MPD s , EDC/PAD (Payment Acceptance Device), Cash memo printing, Delivery sales man identification for each transaction, Vehicle tracking and fuel management system etc. This includes Forecourt Controller connected with Dispensing units, ATG system, RFID Tags and Readers and EDC/PAD at Forecourt.
2.3	Automatic stock and sales accounting, reconciliation and automated customer accounts handling and billing.
2.4	Interface of EDC/PAD Terminal with automation system to reduce payment transaction time.
2.5	Management Information systems to analyze and improve operations in Retail Outlets.
2.6	Integrating BPCL s own ERP, i.e., SAP with retail automation system through BPCL defined middleware for seeking SAP invoice data.
2.7	Integration of Vehicle tracking and fuel management System for Fleet customers.

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Technic	al and Functional Requirement for Retail Automation
Sr. No	Technical and Functional Requirement
	f. Further, the Customer/DSM chooses the mode of payment like Cash/Bank Card/Loyalty card/local account (credit customers). If the Customer chooses to pay by bank Card or loyalty card, the Card is swiped / inserted into the reader.
	g.Additionly, there are three other methods of payments that need to be accounted for. These three transactions are not associated with any payment and they are:
	A particular amount of fuel is taken out through each nozzle for testing every day and this is put back into the tank. This type of transaction carried out is not associated with any mode of payment. Automation system should support features to capture this data and account for the stock receipt data put back into the tank and do stock loss/gain calculations accordingly. ii.Product Own Use
	Some amount of the product may be consumed for the ROs own use like running generators, etc. The Automation System also needs to capture details of the quantity of product consumed for such purposes and account for the same at the time of sales reconciliation.
	A particular amount of fuel is taken out through each nozzle for sampling and this is sent back to the nearest BPCL laboratory available. This type of transaction carried out is not associated with any mode of payment. At sites with RFID, above three Methods of payment (Testing, Own Use and Sampling) should be possible through Dealers/Site Manager s tag only. If suppose the transaction has been initiated by DSM by showing his own tag, for assigning these MOP, system should ask for Dealer s/Site Manager s tag for completing the transaction. transaction bill should also indicate the MOP type. Automation system should support features to capture this data and do stock loss/gain calculations and generate reports accordingly.
	h.The transaction is completed and cash memo/transaction bill is printed. In case of Loyalty card, bank cards & local account, print outs are always mandatoryFor bank cards the transactions are to be routed through EPS residing in site controller and Loyalty application would be residing in the loyalty EDCs/PADs. The Automation thin client is expected to be put in the EDC/PADs which is controlled by the main automation application resides in the Site controller. PADs/EDCs should also be controllable from FCC GUI on Monitor for Printing/Not Printing Cash Memo . FCC should have the feature of enabling or disabling the entire EDC/PAD through GUI, and there should be a provision for stopping next transaction if previous cash memo has not been printed Or non availability of paper roll .This particular requirement (referred as No Paper No Delivery- NPND) should be configurable and may be enabled at all/select bays at all/select ROs as instructed by BPCL in-charge.
	i. Handover the transaction bill printout to the customer. System should have an option of printing quick bill in EDC. If this is option is enabled, DSM would select the bay, selec the transaction and the bill would be printed in EDC.
	j. One EDC/PAD must communicate with all the MPDs via Site Controller System for assigning Method of Payments and bill printouts. All the bays should be enabled on all the EDCs / PADs, this will give full flexibility to clear transaction from any EDC/PAD at the RO.
3	Vendors Scope of Work
3.1	Providing KO Automation solution including supply, installation and commissioning equipments such as Site Controller System, EPS either residing on Site Controller System or on a single board solid state computer housed in the same closet that of Site Controller System. Integration of equipments like MPD, ATG, EDC/PAD, RFID tags and readers and Monitor. The scope of work shall include the design, supply, installation, testing, commissioning,

training and CAMC Support of the Automation solution provided. For BPCL s scope of work please refer point 4.

Technic	al and Functional Requirement for Retail Automation
Sr. No	Technical and Functional Requirement
3.2	Supplying of Site Controller System as per the tender specifications and all the forecourt equipments like MPDs, ATG, EDC/PAD,Network Router & connectivity mediums, RFID tag readers, Monitor,etc shall be connected to site controller. There should be a provision of Automation Software application in site controller and stand alone Monitor directly connected site controller. Site controller should support wireless mouse and keyboard and dealer shall use monitor for automation purposes like generating reports, analysis loss/gain, shift closing, DSM management & RFID configuration, price updation, bulk receipt entry,etc. Site controller should support connectivity mediums like CDMA,GPRS,Broadband and V-Sat. Automation solution in the site controller must support integration of with all the compatible Magnetostrictive Automatic Tank Gauging (ATG) Systems and Multiple Product Dispensers (MPDs).Site controller must seamlessly connect to Head Office Server for data receipt/posting, Bank gateway for credit card transactions and loyalty server for loyalty transactions.
3.3	VENDOR should integrate EDC/PAD terminal catering to payment requirement and loyalty transaction billing with fuelling. In the Architecture, it is explicit that the EDC/PAD is Centrally connected to Site Controller and can be placed anywhere in the Retail outlet, Outdoor or indoor. EDC/PAD will be used as a thin Client for Automation Application and as thick client for Loyalty application wherever Loyalty EDCs are integrated with Retail Automation application. Further since the maintenance of EDCs shall be handled by different vendor, thin client EDC/PAD application offered by vendor should be easily portable on the standard EDC/PAD. Vendor should share this thin client PAD application along with relevant details required for the integration of application with the EDC/PAD service providers so that the repaired EDC/PAD comes loaded with this thin client at the sites. Further, Vendor should impart training and prepare reference manuals for connecting these EDC/PAD in automation. It would be vendor s responsibility to integrated the EDC/PAD with their Automation application. The APIs, SDKs and protocol documents of EDC/PAD would be shared with the successful bidder.
3.4	Providing a complete Electronic payment solution, which includes integration of EDC/PAD, with Electronic Payment Solution and the application software. The EPS will reside on Site Controller System or a separate single board solid computer but both housed in the same closet. Presently our B24 acquirer is HDFC. Vendor to arrange for all requisite and applicable approvals (viz, RBI guidelines, EMV certifications & PCI DSS complaince) for operating EPS payment system from HDFC or any other acquirer bank that BPCL may engage during the the entire project period including Warranty & Comprehensive AMC . EPS should have the capability of key management and EMV card acceptance inline with RBI mandates like Pin @ POS, TLE, UKPD, EMV card acceptance,etc

	Tee	hnical	and	Functional	l Req	uiremen	t for	Retail	Automa	ition
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Sr. No Technical and Functional Requirement

3.5	Automation solution should support connectivity mediums like CDMA,GPRS,Broadband and V-SAT. BPCL shall provide CDMA/GPRS/broadband/ VSAT Equipments as applicable however other equipments like RS 232 & RS 485 converters,cables , switches, etc. as required for ensuring seamless connectivity would be in vendor s scope. Connectivity charges shall be borne by BPCL / BPCL dealerships. Vendor to provide network router which is compatible with all the existing CDMA, GPRS and broad band modems and the router software should be upgradable for integrating new devises. In case of CDMA and GPRS, BPCL shall handover the connective dongle + SIM combination, to the successful vendor, for the installations at designated sites. In case of V-SAT , network router shall not be used. BPCL shall select the connectivity channel based on the availability of network of service providers which has to be installed/integrated by the said successful vendor at the designated BPCL sites., The software, etc. required for ensuring seamless connectivity from Retail outlet to Bank, Petrocard server and HQ system will be in vendor s scope of work. VENDOR to also ensure communication via VSAT whenever made available by BPCL during the CAMC Support Period. Communication link used by BPCL can be CDMA/GPRS/VSAT or broadband. CDMA/GPRS and VSAT Equipments will be provided by BPCL. Vendor is expected to successfully integrate the communication link as provided/suggested by BPCL with their network router to ensure seamless connectivity. BPCL is also in the process of router based network consolidation at the ROs. The connectivity medium can be ADSL (broadband) or SIM based GSM or CDMA which would be handled by router. In this case, router shall be provided by BPCL and FCC would be connected to the router over LAN. Network router by vendor shall not be needed at such ROs.
3.6	Vendor to set up Head Office Application which would seamlessly integrate with sites for sending/ receiving Automation data like tank inventory, nozzle sale, DSM related, MOP, price etc. which should reach Head office server through the connectivity medium available at ROs in a batch or End of Day (EOD) basis. The Head office application shall also be used for generating MIS as per the given format, monitoring automation performance of network, price updation at sites, remote monitoring, etc. The server/s hardware shall be provided by BPCL. Vendor to set up & manage the Head Office Application and ensure that the application is always up & running. This shall include setting up database, carrying out database maintenance activities in sync with BPCL server team, installing new software patches as required, assisting in data/report retreival as per BPCL requirement from time to time, managment of users, handling HOS application/report related issues, etc. for the entire project period including Warranty & Comprehensive AMC.
3.7	Integration of HQ System & SAP.(Validation of Density Data and Invoice of supply details from Supply location to RO at HQ level).Vendor shall also support the upgrades like product name change, introduction of new product, enabling new SAP middleware, setting up database tables,etc for the entire project period including warranty and comprehensive AMC.
3.8	The VTFMS (Vehicle tracking and fuel management system) integration activity will be in the joint scope of Automation VENDOR and VTFMS vendor. Automation VENDOR shall be required to make changes to his system to accommodate VTFMS solution during the the entire project period including Warranty & Comprehensive AMC without any additional cost to BPCL. BPCL shall coordinate for this integration.

Technical and Functional Requirement for Retail Automation

Sr. No	Technical and Functional Requirement
3.9	VENDOR s scope of work includes termination, commissioning of power cables and communication cables, which includes crimping/soldering as required including supply of RJ terminals and three pin socket plug for connecting automation equipments to power source. BPCL shall provide conditioned power with ready to use 5A power points in Automation IT Rack and EDC box (where ever applicable). Vendor shall be required to connect their equipment to the terminal blocks or sockets three pin Plug 5A type.supply of Network LAN switch shall be in vendor s scope. Though laying of LAN cables is in the scope of BPCL, termination of the LAN cables in the Automation equipments, Crimping of Registered Jacks (RJ-11, 45 etc. as applicable) etc. to the LAN cable is in the scope of Vendor.
3. 10	BPCL will provide Earthing pits and Earthing points for connecting all electronic hardware pertaining to Automation solution. VENDOR to connect equipments to BPCL RO earthing and confirm it s satisfaction with the earthing, on record, before commissioning the RO. The Confirmation of Earthing by the VENDOR means that on the day of Automation commissioning, the VENDOR is responsible to check whether the earthing & power made available by BPCL for Automation is as per Automation Equipment Requirements. VENDOR to also check at RO the Availability of UPS power and Proper DG Set for Automation Equipments before commissioning of Automation at site. Vendor is required to confirm availability of regulated power conditiong at RO in all aspects in the ROAutomation commissioning Report.
3. 11	VENDOR must offer a Automation solution that meets various requirements that can be broadly classified as given below:
3.11.1	WET STOCK: The following are the key requirements with respect to the Forecourt and the wet stock sale
	I. Effective Control Mechanism: Effective stock control mechanism and to prevent manipulation at forecourt that can address the Q&Q issues at the Forecourt. This has to be achieved by:
	a.Maintaining records of Q&Q checks daily for all products and tanks. For nozzles it is quantity measurement tests for Tanks it is product density monitoring i.e. daily morning and after bulk receipts into the tank. In case of ATG with
	b Desired fuel product and quantity is delivered to the customer
	c.Daily checks of sampling, testing and own use functionality should be enabled on EDC/PAD.
	d. Testing, Sampling, own use transactions shall be cleared from EDC/PAD itself. However the transactions can be confirmed only by Site manager by way of using his tag for the transaction authorisation. In case of EDC's these three
	MOPs should not be assigned with DSM tags.
	e. System to generate and store exclusive Exception reports for ATG (Product High/low, Power on off, High water levels, Density variation) It is implicit that Vendor can tap only those functionalities provided by ATG Console and supported by protocols available/ provided by BPCL.Vendor is expected to integrate with magnetorestrictive type ATGs.In case online density functionality is available in the ATG, FCC should be able to send and display this net density (at 15 degrees) in the MPD which supports density display. System should also generate alerts/email for density variations.
	f. There should be a parameterized option that whenever ATG detects a decantation in any particular tank, all the nozzles connected to that tank should be stopped till the decantation is completed.Further, a parameterised option is required so that the connected nozzles are stopped if ATG probe is not working/disconnected.
	g. It should be possible to define a threshold low stock level of the tank and on reaching that product level in the tank, Automation application should stop all the MPD nozzles connected to that tank.This would also be applicable if there is high water level in the tank beyong the configured level.
	h. EDC/PAD should also be capable of handling Local credit accounts through Site Controller System. VENDOR to understand Local credit account handling process at BPCL site itself and offer the best suitable solution.
	 i. Define various levels of security for accessing Automation application. j. Identification of DSM for each transaction. This also includes capturing of preset quantity entered by each DSM , if provided by MPD, for every transaction. In case preset quantity and delivered do not match, a warning to be generated in terms of SMS and e-mail to Officer-Incharge/Dealer A MIS of all txns wherein the preset qty & delivered qty do not match, should be generated & mailed to the sales officer at a predefined no. of days. Automation GUI to generate a pop up for all such mismatch. Alert (mail/SMS) generation would be parameterized and would be enabled
	wherever desired

Technical and Functior	nal Requirement for Reta	il Automation
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Sr. No	I echnical and Functional Requirement
	k. Automation system should enable mandatory Preset for all the connected MPDs. This means nozzle will not start
	ruening unless Preset is done on the MPD. It should be possible through system to enable (or disable) mandatory Preset
	reature on the individual bays. This should work at all MIPDs with KFID, non-KFID or combination of KFID & non-KFID
	MPDs at any KO.
	I. This must also have the provision for manual entry of physical receipts for the ROs and ATG would capture
	the receipts automatically. System generated ROIR would be based on the manual entry of receipts only. However, if
	manual receipts are not entered, system should capture the ATG captured bulk receipt in the ROIR report.
	m. It should be possible to define a time period for confirming the bulk receipt in the automation system after
	completion of product decantation in the system. If the receipts are not confirmed in that time period, iAutomation
	application should stop, all the MPD pozzles connected to that tank The option should be parameterised and time
	poriod should be configurable
	n Maximum cash holding limit for DSMs/Cashiers should be configurable in ECC GUL so that an alarm is generated
	both in ECC (visible on Monitor) and EDC/PAD in case the limit is exceeded
	II. Enhance Forecourt Efficiency
	a Effective site control mechanism, i.e. control of forecourt by integrating various forecourt equipment like MPDs
	of different makes. Automatic Tank Gauging System, RFID, etc. using a Site Controller System and the FDC/PAD
	terminal provided at Forecourt
	b Monitoring and control of wet stock sale: It should be possible to monitor and control the status of each Dispensing
	unit (idle or active etc.) on a user screen on Monitor (FCC GUI) which should be remotely accessible from BPCI
	cales offices and head office Eurotionalities like Price change RO closure etc. can be achieved by polling the HO
	sales offices and field officer dictionances like if fice change, no closure etc. can be achieved by poining the rig
	c. Remote GUI provision should be available both in static and dynamic IP as available at the RO
	d Identification of the DSM using Attendant tagging and/or through allocation dedicated EP to each DSM before
	start of shift by configuring it in ECC CIII as desired by by BPCI site in-charge
	e Enabling automatic stock and sales accounting/ reconciliation i.e. Tank Based and Totalizer based
	f Peak time statistics should be available in order to enable functions like Tank Lorry receipt planning planning
	resources for peak hours like manpower utilization and Dispensing Unit utilization pattern atc. A graphical
	representation of the peak hour statistics Product island & vehicle segment wise should be available at RO level and
	HO loval
	g. The cash memo generated should be automatically numbered at least carrying following-
	i) Header (Configurable Site controller)
	ii) DSM name
	ii). Dow hance,
	in) Bay No. & Nozzie No. Ironi which ruening has happened
	iv)Fuelling Time and Date Stamp as well as receipt printing date and time
	iv) Vehicle No when input.
	v)Product Name, Rate/Ltr, Vol, prese amount & sale amount
	vi) The cash memo will also carry CENVAT and local sales taxes details as applicable in that site. The same will also
	generate a comprehensive report in FCC. VENDOR to certify the same from BPCL.
	vii)The header/footer of the cash memo should be configurable in Site Controller System for RO details, local campaigns
	etc.
	Volume and Amount should be of higher font size than that of other rest of the test so that these values are distinctly
	visible in the cash memo print. The font of the cash memo should be of higher size than that of conventional EDC print
	out. Vendor to get the font size and receipt format approved by BPCL during FAT/SAT for implementation.
	h. The Site Controller System should store at least four months transactions @ not less than 3000 Transactions per day
	i. If entry of vehicle in EDC/PAD is alpha-numeric, system should not be affected if there is any gap in between the
	vehicle numbers.
	III. Fuelling Linked with Method Of Payments.

Sr. No Technical and Functional Requirement

a. Enabling Electronic transactions at Forecourt i.e. post-paid using either EDC/PAD including payment by all modes: Cash/Credit card/ Debit card/ Petro Card. Card may be chip, Mag-strip based or Hybrid cards. VENDOR to certify EPS for VISA/MASTER (HDFC and one additional bank), Amex, BPCL assumes that (Maestro and Cir-rus) being a part of Master Card, cards with these gate-ways are also covered under EPS offered. For the current PAD i.e. EDC, provided by Ingenico/Verifone Magic Cube but BPCL may introduce any two new EDC make/s during the entire project period incl warranty and CAMC which should be integrated at no additional cost to BPCL. BPCL shall coordinate for deliverables from EDC vendors required for EPS certification by Automation vendor. EPS certification and complaince as per RBI mandates and PCI DSS standards is in the scope of automation vendor.

b. Any DSM should be able to operate any pump to enable faster service using RFID tag for authorization on MPD. Depending on site requirement, an RO may have few MPDs on RFID mode and other MPDs on non-RFID mode (Solution by vendor should support the said flexibility). In case some MPDs are operated on non-RFID mode, it should be possible to assign one DSM to multiple bays.

c.The system should allow multiple simultaneous card tx(bank cards or loyalty cards) at any given time. System should support simultaneous card transactions from different EDC/PAD irrespective of the connectivity medium.

Technical	l and	Functional	l Req	uireme	nt for	Retail	Automa	ation

Sr. No	Technical and Functional Requirement
3.11.2	Dry Stock Management:
	a. The sale of dry stock i.e various lubricants and other items at RO for sale except Fuel, must be a part of the Automation system. For this an application should be integrated with Automation software. This application is required at island for selling non-fuel items by EDC/PAD. This function to bring dry stock sale on EDC/PAD including a receipt printing. There should be option to enter digital code on EDC/PAD itself which will account for dry stock sale. The type of commodities should be configurable. After entering the product code the payment option should be enabled on EDC/PAD i.e. cash/credit/debit/BPCL Loyalty card (Petrocard/Fleet Card).
	b. There should be a provision to maintain the product wise inventory of the non-fuel stock. Stock and sale reconcillation should be possible and system to generate and store a reconcillation report after every day end
	c. The automation application software must generate various reports on the sale of dry stock. This requirement essentially facilitates lubes or any item sale capture on the pump island against the item code and amount. The system to have a provision to handle 999 type of Dry Stocks. Each Dry Stock will have a 3 Digit Item code (from 001 to 999), that will be fed on EDC/PAD, and will be mapped internally in Site Controller with the product code as in BPCLs ERP solution called SAP. The type of Dry stocks, product codes etc. shall be conveyed to the successful bidder.
	d. Following is a basic model for lube inventory management. o Maintain the inventory details. o Maintain Lube items makes. o dry stock sale to be corresponding to the makes maintained in the FCC. o Reports can also be based on the makes. o system to provide a pop-up alert in FCC GUI in sales room on specified low inventory of each make.
3.11.3	Back End/Reports
	a. The back end of the Automation system shall consist of a Database in the Site Controller System that includes all information regarding the details of the RO, the details of the underground tanks, dispensing units, Dry stock details, etc.
	b. The application software running on the site controller shall generate various reports like the daily, weekly, monthly sales/ stock reports, wet stock and dry stock reports, supplier reports etc. as described in Information at RO systems.
	c. The system at RO will have auto & manual Shift change. Solution should undertake auto EOD (meaning batch settlement) which is essentially means transfer of data from site controller to HOS. The system should be well configured to perform EOD and Batch Settlement as per RO convenience. The timings may be different for each RO. Provision of forced EOD shall be there as per condition. Auto EOD (once in 24 hr) should happen at a time when no transaction is happening at the RO zone of silence which will be checked and decided by the system.
	d. Management Information Systems to analyze and improve operations in Retail Outlets. This includes mentioned Reports in the Tender.
	e. Integrating BPCL's own ERP, i.e., SAP with Retail Automation System at HQ level and RO level for inventory details.
	f. The Head Quarter system at HQ must have access to information from the site controller over network for sales information and price change with prefixed timings for application. HQ system to have access of Site and functionalities like Price change, RO closure etc. can be achieved by push from HQ application or pull from Site Controller.

Technic	al and Functional Requirement for Retail Automation
Sr. No	Technical and Functional Requirement
51.110	 g. Price change option for MPDs at Forecourt through Site Controller GUI should be possible thru password and the same should be recorded at back end and never editable. That means BPCL must know and be able to validate all price changes with date and time stamp for last one year. There are two steps for Price Changes at RO: 1. Getting New Price: i). The Price can be fetched at any time from HOS by manually clicking the FCC GUI option. ii). The Prices Can be Manually Keyed into the System . iii) The HOS can send the New Prices to the system. 2. Submit the New Price in the System and MPDs . i)After new Price is Entered/Fetched, it can either be submitted from the FCC GUI instantaneously or Can be Prescheduled for a Given Date and Time. ii) All this has to be password protected and can be Tracked in the system
3.12	All the equipment used for automation must meet the requirements of statutory agencies as applicable and shall obtain all necessary permission/licenses to implement Automation hardware/ software at the sites in India. BPCL may carry out FAT (Factory acceptance Testing) of all equipments before deployment at sites.
3. 13	Vendor shall be required to seek CCOE compliance of entire automation system . Vendor shall be required to furnish all the necessary documents, certifications, etc as desired by the CCOE department. The approval may also include seeking compliance certification from CCOE approved testing lab for the integration of various equipments which would also be in vendor s scope without any additional cost.
3.14	Vendor shall be required to provide comprehensive test certificates regarding the compliance of properties of Site Controller System as per this tender requirements.
3.15	After Sales Site Acceptance Test, Warranty & Comprehensive AMC support and defect liability
	a.VENDOR s scope of work also includes the User / Site Acceptance Test and WARRANTY & FOUR YEAR COMPREHENSIVE AMC SUPPORT for the complete solution including the hardware, software (at site & head office), materials, and services for all the automated sites. b. Site Acceptance Test of the Retail Outlet and the associated documental activity has to be completed within one month after successful RO commissioning.
	c. It is a complete responsibility of the VENDOR to Pre-inform concerned BPCL officer about the schedule of RO Visit for Site-Acceptance Test and Get the Site Acceptance document verified, signed and Stamped by BPCL Site in-charge.
	d. In case, the BPCL officer could not be present at the RO, the Site Acceptance document shall be verified by the BPCL officer within 10 days, on submission of the same by the VENDOR. This date of Verification of the Site Acceptance document by the concerned BPCL officer shall be the date of Site Acceptance of the RO.
	e. Post Warranty Comprehensive AMC support period shall be 4 years. The methodology for start of CAMC period has been detailed in Special Purchase Conditions.
	f.Comprehensive AMC Support means all spares and hardware components to be replaced by vendor including software (software updates/patches) to be provided within project period to ensure required uptime of the Automation system at the RO and thus avoid downtime beyond permissible limit. CAMC Support shall include site visits for attending BROMA complaints for Breakdown maintenance. All this shall be covered under CAMC Support payment by BPCL and NO EXTRA PAYMENT other than this shall be done to vendor.
	 g.During the entire WARRANTY & CAMC period , BPCL can add eight functionalities which would be within the scope of technical and functional requirement of this tender. Vendor to deliver the functionalities without any cost to BPCL. i). These requirements would not involve any addition of hardware from vendor, hardware if required shall be provided by BPCL. ii). If the site level developments are requested it would be for - additional report/alert, ATG related functionality, addition of process/steps in auto billing to improve operational efficiency, customer acquisition module, etc. iii) At HOS level it would be for - support to data consolidation & Disaster Recovery Module, SAP integration for additional functionalities and addition of report/alert etc.
	h The Defect Liability period for the Automation Software and Hardware, shall be the Warranty period.

Technic	Fechnical and Functional Requirement for Retail Automation		
6 N			
Sr. No	Technical and Functional Requirement		
	1. Vendor to maintain sufficient Spares at it's respective State Level Head Office or at the hubs discussed and agreed by BPCL		
	j. Vendor shall fix all problems arising of / related to automation and for this purpose would require providing necessary service support infrastructure .VENDOR shall appoint adequate manpower at RO for adequate period which includes implementation and proper training to BPCL Officers, DSMs etc. to ensure efficient working of the Automation System. The experienced person stationed at the Retail Outlet should have the essential knowledge and capability for resolving/ fixing all issues/ problems/ faults associated with the Automation solution provided. He shall hold the complete responsibility for maintaining the system and for fixing up all problems by referring the problems to VENDOR s help desk support team. VENDOR to maintain sufficient Spares at State Level Head Office of BPCL. Vendor s scope of work is both for Material and Software (complete solution at RO and HQ) supplied by the Vendor as per Tender requirements. Vendor should keep sufficient spares with their Field officers so that vendor can cater to site downtime issues within specified time period for attending complaints.		
	k.VENDOR to also depute adequate manpower on BPCL HQ server for backend application management, monitoring reporting module and ensuring correct data posting from site, application patch upgrations, database handling, maintenance activities, database & application level support to other functions as and when required, user management, etc for the entire project period including warranty and CAMC period. Remote access for the application and server shall not be given by BPCL.		
	1. All complaints will be logged through BROMA only as VENDOR is under obligation to close all complaints in BROMA. Complaint downtime i.e. time taken between complaint resolution and complaint logging will be calculated by BROMA. Vendor is required to be fully aware of the BROMA application and need be should seek training from BPCL staff in-charge for efficient handling of complaints through BROMA .		
	m.VENDOR to ensure that the uptime for the RO Automation system is at least 98% and Rs.500 per day per retail outlet will be charged from VENDOR incase of more than 2% downtime beyond a resolution time of 24 hrs. Vendor need to resolve and close the complaint in BROMA in 24 hrs from the time of logging of BROMA complaint. A penalty shall be recovered from VENDOR in case the total downtime between call logging and complaint closure beyond 24 hrs (resolution time) exceeds 2% of the total time during Warranty and CAMC period as mentioned in Special Purchase Conditions		
3.16	Training		
	a. VENDOR shall impart necessary training to the forecourt personnel and the site managers so as to familiarize them with the new technology and also to make them capable of operating the system smoothly and troubleshoot whenever needed within CAMC period.Vendor should prepare a friendly user manual covering all aspects of RO Automation and hand it to the Retail Outlet staff after training.		
	b.Adequate detailed training session (hands on training) has to be carried out by VENDOR at each RO exclusively for the Forecourt personnel. Adequate training should also be imparted to the site managers which will include the overview of Automation, operational aspects, the design and engineering aspects, familiarization with the application software, generation of reports, relevant database management system, trouble shooting etc. VENDOR is also expected to furnish adequate training aids like operating manuals to the staff for clear understanding of working of the system. RO-wise proof of Training records has to be submitted.		
	c. A comprehensive training program shall be organized at the Regional Office and all territory offices (state offices		
	d.Vendor participation shall be sought at RO/Territory/Regional level automation meets/trainings and site review visits with no extra charges payable to vendor by BPCL during Warranty & CAMC Support Period. The frequency of these meets, trainings and site reviews shall be advised by BPCL. e.Vendor is also required to prepare training module which can be ported on compact disc (CD) that can be used for		
	circulation. The training module shall have installation/configuration videos, standard operating practices, demo on		
4	BPCL SCOPE OF WORK		

Technic	al and Functional Requirement for Retail Automation
Sr. No	Technical and Functional Requirement
	a.Provisioning of MPDs at sites which support Automation communication, i.e. with the necessary communication
	ports. b Communication protocol document for all types of MPDs. ATCs & EDCs/PADs. Simulators to be made available
	by BPCL for all new equipment integration
	c Supply & Installation of ATG (Auto Tank Gauging) at the retail outlets including its console.
	d Installation of IT racks for Automation equipments
	e. Supply & Installation of LED displays for Density and promotional messages at Forecourt. (*optional for BPCL).
	The LEDs are optional, however the system to have provision for their interface. Vendor's system should support LED
	display RS-232,RS-485 & LAN type.
	f.BPCL will provide Earthing pits and Earthing point for all electronic hardware pertaining to Automation
	solution. VENDOR to connect equipments to BPCL RO earthing and confirm it s satisfaction with the earthing, on
	record, before commissioning the RO.
	g. BPCL shall provide CDMA/GPRS dongles, and VSAT Equipments as applicable. Monthly charges for connectivity shall also be bourne by BPCL. All other software and hardware including network router required for ensuring seamless connectivity from Retail outlet to Bank, Petrocard server and HQ system will be in vendor s scope of work. VENDOR to provide network router with software which is compatible with the existing modems/dongles of service Providers for broadmand, CDMA & GPRS. The software of Network router should be upgradable to integrate any new modems/dongles and the integration should be done with no additional cost to BPCL during the entire WARRANTY &CAMC period. Vendors Automation solution (including software & hardware) to support all functionalities in the scope of the Vendor via CDMA, GPRS, broadband and VSAT. Broadband shall be used wherever CDMA and GPRS options are not available.
	h. Providing regulated power supply through UPS for RO Automation shall be in BPCL's scope of work.
	i.Supplying and laying of communication cable is in scope of BPCL. Vendor to check the continuity of cables before commissioning.
	j. All hardware requirements for running HQ System will be provided by BPCL, however vendor would be responsible for the up and running of the offered HOS application. Any application upgrade that may be required from time to time would be entirely in vendor s scope. The server shall be SQL based systems on virtual platform. BPCL is also in the process of standardising theAutomation database tables which shall be shared with the vendor for integration during the amount of CAMC paried.
	k. All hardware and software requirements pertaining to Vehicle tracking and fuel management system will be provided by BPCL.
	I.All hardware and software of LCD display (if opted by BPCL) shall be provided by BPCL.
	m. BPCL may decide to provision Outdoor Payment Teriminals (OPTs) as payment acceptance devises at
	forecourt.BPCL shall arrange for hardware and software (SDKs,APIs & protocol) and would be shared with the vendor.
	However, integration of OPTs shall be in Vendor s scope during the entire CAMC period of 4 years including the EPS
	certifications with acquirer bank/s (limited to EPS application only) shall be arranged by the vendor at own cost .BPCL
	shall co-ordinate for the OPT hardware support for complaince.
	n.BPCL shall set up the middleware between SAP system and Automation HOS for posting Invoice data, RSP upload
	and inventory tracking-SPADE. Vendor to support the activity by setting up required tables in the database and
	configuring product material codes from time to time.
	o. PAD (PAYMENT ACCEPTANCE DEVICE): Currently the PAD (PAYMENT ACCEPTANCE DEVICE) used in BPCL is Magic Cube/ Ingenico.These EDC/PAD shall be used for both Loyalty, EPS and Automation transactions. The PAD may also be referred to as EDC (Electronic Data Capture) Terminal, in communication from BPCL. All the SDKs and interface documents will be made available by BPCL to successful Vendor.
	If BPCL decides to install OPTs at sites, site controller should support both EDC and OPT simultaneously, however Loyalty has to be made available only on EDC.
	BPCL may also introduce different make EDC/PAD (maximum 2 makes) terminals during entire warranty & CAMC period. Vendor to integrate these terminals including required certifications of EPS with bank at no additional cost to BPCL. SDKs, API and Protocol documents shall be shared with the Automation vendor for carrying out integration.
	p.BPCL shall arrange for power required for EDC/PAD in PAD holder at the forecourt pedestals.
	q. BPCL shall supply and mount the EDC/PAD holder stands on the forecourt pedestals.

Technical and Functional Requirement for Retail Automation		
Sr. No	Technical and Functional Requirement	
	r Apart from the details listed above, providing all other items, hardware/software and rendering all other kinds of	
	work required for the successful completion of this project shall be in VENDOR s scope	
5	Architecture :	
	Diagram is enclosed as Annexure C	
	The Site Controller System is integrated with all the forecourt equipments like MPDs,EDC/PAD/OP1, ATGs, KFID	
	Tags & readers, etc. At the back office, monitor is directly connected to FCC for automation purposes like monitoring	
	or dispensing units, generating reports, etc.	
	b.Electronic payment Solution (EPS)	
	The second part of the Automation solution takes care of the Payment System at the Retail Outlet. The customer can	
	pay by means of Cash/Credit/ Debit/ Smart cards. The cards may be chip, mag-stripe or Hybrid. The electronic	
	payment system comprises of EDC/PAD and EPS either residing on Site Controller System or on a single board	
	solid state computer housed in the same closet as of Site Controller System. The Debit/Credit / Smart card	
	transactions will be initiated at theseEDC/PAD terminals. An Electronic Payment Solution (EPS) residing at each KO	
	on Site Controller System will capture the transaction details and route it to the acquiring bank for Credit/ Debit card	
	transactions. BPCL loyalty card transactions should be routed to Loyalty server. The loyalty and bank transactions	
	would happen over a connectivity medium connected to network router or V-SA1. The EPS will reside on Site Controller	
	and loyalty application shall be in the EDC/PAD.	
	The responsibility of providing the Petro Card/ Smart Fleet terminal application with relevant interface for	
	EDC All EPS related transactions and settlement should hannen via the Site Controller System loyalty. Card will be	
	dealt by Lovalty application EPS is meant only for Credit & Debit card Transactions. However vendor solution must	
	integrate loyalty for Petro card/ fleet card) Vendor is also responsible for resolution of support related issues arising out	
	of Bank Card (Credit/Debit) or Loyalty (Smart Card) transactions at sites	
	or built curu (crout) or boyany (crimit curu) tunbuctoris at sites,	
	The solution provided must be compliant with the following industry and IT standards:	
	• TCP/IP	
	• ODBC	
	Vendor may be required to set up HSM for key injection of EDCs for complying to RBI mandates. Automation vendor	
	shall work with EDC vendors for management of EDCs for key management however vendor to ensure that the key	
	injection facility is available Pan India.	
	c. Head Office Server:	
	Site controller should send the site data to head office server over available communication medium at RO. For data	
	transfer. SFTP or https based web services to be used.	
6	TECHNICAL REQUIREMENTS:	
1.1	Site Controller:	
6.1	Functional Requirements:	

Technic	Technical and Functional Requirement for Retail Automation	
Sr No	Technical and Europtional Deguinement	
SI. NO	The Site Controller System must be a Solid State based device(independent of the PC platform) that controls and integrates all forecourt equipment like Dispensing pumps/MPDs of indian/foreign makes, magneto-restrictive type Automatic Tank Gauging Systems of standard makes, RFID Tag Readers etc. The Automation solution in the site controller must support the automation compatible makes of Following MPDs (Multi Product Dispensers).	
6. 1.1	 Larsen & Toubro Gilbarco Veeder Root Wayne (Wayne and Dresser Wayne are the names of same company and have common MPDs however if Wayne has different MPDs, , BPCL to provide the protocols and simulator for integrations, which shall be done at no additional cost to BPCL) Nuovo Pignone (now referred Dresser Wayne Pignone) Dresser Wayne Midco Tokheim Tatsuno 	
	During the entire CAMC period of this tender, BPCL may require integration of Non-Space units, Auto LPG and CNG dispensers of any make (supporting communication) with Automation System, BPCL will provide the Protocol to the VENDOR and allow VENDOR a period of SIX Months for each new equipment their Integration (if two or more new dispenser types are required to be integrated, at the same time, the period of six months shall run concurrently with no additional cost. Further, BPCL may also introduce CRIND based MPDs. The integration of CRIND functionalities shall be in vendor s scope of work and should be done with no additional cost to BPCL in entire warranty & CAMC period. A period of six months shall be allowed for the integration and all the requisite protocol & interface documents shall be provided by	
6.1.2	The Automation application in the Site Controller System must enable the following basic functions:	
	a) Provision of START and STOP for individual and all MPDs	
	b) FCC should capture electronic totaliser readings from the DU/MPD after every transaction. Switch pump to reconciliation mode - Reconciliation Mode means that the site controller will try to carry out the Shift reconciliation and fetch totaliser readings from all MPDs at the RO. If some MPD is not responding with its totaliser reading due to its fuelling state, a suitable warning will be displayed on the FCC GUI on the monitor. Re-conciliation will not be successfully completed and reconciliation will have to be repeated, without manual intervention at site (i.e by the system itself)	
	c) The Site Controller System must effectively communicate with all the Forecourt equipment, continuously polling data from each equipment so that control of the Forecourt equipment is possible from FCC GUI through Monitor. All data regarding the MPDs,ATGS and other forecourt equipment shall be available at the site controller GUI and the required data shall be made available at the HQ also.	
	d) Site controller should able to handle multiple decimal settings of MPDs. Some MPDs may be required to run in three Or one decimal places while other MPDs continue to run standard 2 decimal places at one site. FCC should correctly capture decimal places and generate report in this case.FCC should also capture the preset and actual delivered guantity of every transaction through MPDs.	
	e) If MPD is capable of providing the information on change in operational mode (Automation to manual mode or vice versa) through a communication protocol, FCC should be able to take the input and generate report at the RO level. The consolidated report is also required at HOS level RO wise, Territory wise & Regional level. The report format shall be shared with the successful bidder	
	f) If MPD is capable of providing the information regarding change in K –factor (calibration factor) through a communication protocol, FCC should be able to take the input and generate report at the RO level. The consolidated report is also required at HOS level RO wise, Territory wise & Regional level. The report format shall be shared with the successful bidder. Further, automation system should generate email/SMS alerts for such instances of change in K-factor at MPD.	

Technic	Technical and Functional Requirement for Retail Automation		
Sr No	Technical and Experiment		
51.110	g) If MPD is capable of providing the information regarding the printing of last trasaction through a communication protocol, FCC should be able to enable NPND (No Paper No Delivery) mode for the transactions. Under this FCC should stop the next transaction if the print is not taken either by MPD or EDC or any connected point of sale devise. Further, if the vehicle no is entered while printing bill through MPD, and MPD is capable of providing this vehicle no along with the transaction details to automation, Automation system should generate SMS (for acquired customer) for that transaction based on the threshold defined.		
	h) The Site Controller System should control the RFID based attendant tagging wherever installed. RFID tag readers should be configured in parallel simultaneous operation in the forecourt.		
	i) In RFID Mode if the Cash limit of DSM is reached he should not be able to do fuelling without RO Manager/Dealer unlocking the DSM in FCC GUI which shall imply settling the amount in hand with cashier/RO manager. The Cash limit should be configurable at site controller through Monitor.		
	j) The communication between the Site Controller System and Dispensers/MPDs should be two way so that necessary data, like product price,etc can be downloaded to the pumps via Site Controller System.FCC maintained Product prices should supresede the prices maintained in individual MPDs, when in Automation mode.		
	 k) Site Controller System holding the Automation solution to give functionality for Auto SMS AND Auto-email to vehicle owners as described in HQ system. l) Site Controller System should be able to pull fresh Product prices from HQ System through a option in FCC GUI for Dealer. 		
	m) BPCL should be able to send instruction from HQ system to RO Site Controller System for purpose of Price Change, MPD Closure, RO shutdown. It should be possible to freeze and record the complete RO status at the time of RO shutdown and save it in a printable format at HQ system. With RO Closure NO MPD, connected in Automation, will be able to transact further. By the term Freezing BPCL means that the snapshot of the Retail outlet (MPD Electronic Totalizer values, ATG Stock Values and will be recorded by performing a forced Settlement before RO Closure). Reopening of the RO after Remote shutdown, and the general steps of Shift Reconciliation to ensure best possible data capturing process to be developed by VENDOR, as approved by BPCL. Remote GUI view-ability provision has to be there in the Automation system. Functionalities like Price change, RO closure etc. can be achieved by polling the HQ system from the Site Controller OR pushing the updated prices from HQ to site controller.		
	n) Site Controller System should be a solid state based device having following features:		
	i. Must be microprocessor/microcontroller based		
	ii. Embedded Operating system (windows/Unix/any other proprietary OS)		
	iv. Should have adequate processor capacity and on-board RAM to meet the tender requirments. iv. Should have communication ports like RS485,RS232,etc switchable ports with neccessary optical isolation for these ports to connect forecourt equipments. FCC should be scalable to configure additonal MPDs and ATG as per site requirments.		
	v.It should have Flash memory as program memory & battery backed up data memory (adequate memory).		
	vi.19 rack mountable		
	o) Site Controller System should be able to integrate different kind of Forecourt devices such as different makes of MPD		
	(as mentioned in point no 6.1.1 above), ATG, KFID tag readers , EDC/PADs etc.		
	a) It must be incorporated with a real time clock chin		
	r) The operating temperature should be 0 to 50 Deg C		
	s) Power supply (230 V Single Phase AC $\pm 10\%$, 50Hz $\pm 5\%$). Site controller should have adequate inbuilt measures to		
	handle power surges.		

Technical and Functional Requirement for Retail Automation			
Sr. No	Technical and Functional Requirement		
	t) FCC should capture ATG data at regular interval of 30 seconds and Automation System should be capable of hallting the sales from the nozzles corresponding to that particular tank in case:		
	i.There is a tank ATG probe communication failure with FCC.Similarly if ATG console is not working, fuelling from all the MPD/DUs nozzles should stop.		
	ii.Commensement of decantation of Product in the tank.		
	iii.If manual bulk receipts are not confirmed by dealer in stipulated (configured) time frame after the decantation is completed.		
	iv.In case of product in the storage tank has gone below the predefined level.		
	v. In case the water level in the storage tank is above the predifined level.		
	Automation system shouldl have parameterised option to enable/disable these ATG related functionalities. Vendor to carry out the configurations as per the instructions from BPCL in-charge.		
	Apart from EOD, FCC should send the tank inventories to HOS such that the HOS is able to generate % tank report on teh basis of 7,8 & 9 hrs in morning and 19,20 & 21 hrs in evening.		
	u) Site Controller should be connected to the Monitor over VGA/HDMI for report viewing and handling Automation related operations at RO.		
	v) Site Controller should have a facility of virtual keyboard for data entry. The data entry field should be possible with both virtual keyboard and wired/wireless external keyboard.		
	w) Site Controller should support installation of wireless mouse and keyboard.(Supply of wireless mouse and keyboard is also in teh scope of vendor) FCC should support standard make of USB DeskJet and laser printers (if provided by BPCL or dealers). Vendor to support the printer installation. Suitable drivers for the operating system of FCC would be shared with the successful bidder.		
	x) Vendor to additionally provide option to access reports/other FCC functionalities on separate laptop/PC over LAN.		
	y) Site Controller should support PDF for report generation and download through FCC.		
	z) Site Controller should be accessible over internet with or without static IP for handling operations at the RO like monitoring fuelling status, Invoice Entry. Vendor should have adequate security access provisions for accessing the site.		
	aa)BPCL is in the process of placing Digital price poles at the Ros. Site Controller should be able to integrate with the price pole electronics and push the product prices. It would be binding on the vendor to carry out this integration in the entire Warranty & AMC period whenever requested by BPCL at no additional cost. The necessary protocols, operating manuals & simulators as required for integration of price poles would be made available by BPCL. It may be noted that the digital price poles would be sourced from more than one vendor.		
	bb) The POWER SUPPLY MODULE of Site Controller System must have a Li-Ion battery or at least equivalent make (or as approved by BPCL) to meet following minum specifications:		

l echnic	al and Functional Requirement for Retail Automation
Sr. No	Technical and Functional Requirement
	 i) Minimum backup of minimum 10 minutes at full load of Site Controller System ii) At the time of input power failure to Site Controller System, there should be no affect at all on Site Controller System operation. The transition should happen in an online fashion. iii)In case the input power is not restored within the battery backup time, Safe Shutdown of the Site Controller System
	should happen when the battery is at the verge of complete discharge. iv)The Power supply module so designed should communicate with the Operating system of the Site Controller System so as to handle such cases intelligently including the shutdown, Site Controller System operations, settlement of current transactions etc.
	v)There shall be external LED indicators when Site Controller System goes in battery mode and an audible alarm/beep to be on when the Site Controller System is on battery mode. vi)The battery should be of a standard make and follow all the applicable international standards and safety norms. The
	battery shall be covered under Warranty and CAMC Support Period. vii)The battery should be detachable. Even Removal or Absence of the battery should not hamper the normal Site Controller System operation when normal UPS input power is present. However presence or absence of battery in Site Controller should be indicated with an LED.
	cc) Site Controller System to maintain a downloadable Log of power failures, viewable from FCC GUI through monitor.
	 dd) Site Controller System should support TCP/IP ee) Site Controller System should be able to communicate remote server via GPRS, CDMA, VSAT and Broadband for data transfer
	ff) Site controller should have adequate CPU and mamory capacity to handle continuous and simultaneous transactions by the connected MPDs. Transaction loss or wrong data capturing due to System hardware limitations shall not be acceptable.
	gg) Any make of site controller which fails to confirm picking up MPD totalizer readings cumulative basis at least 10.2 format of digit value, shall not be accepted. BPCL will not allow wrap up formula application through RA Software in this case. Vendor to submit a written confirmation from site controller manufacturer in regard to this with tender specification.
	hh) If any ATG probe is not working the nozzles connected to that tank should stop fuelling. Similarly if ATG console is not working, fuelling from all the nozzles should stop.
	ii) Site controller should be able to capture and display the online net density from ATG (wherever ATG with online density functionality is available) OR the manual density entered at Ros, in the MPDs which have density display.
	jj) Site Controller should communicate with EDCs on Ethernet or Serial Port. The sites may have both EDCs and OPTs (if provided by BPCL in future)integrated with FCC. EDCs would be used for loyalty transactions.
	kk)BPCL shall provide a Wall mounted IT Rack of Dimension 12Ux600Wx500D with 19 Mounting Angles or equivalent (for mutual convenience). All the components of closet for Automation equipments i.e. Site Controller hardware , EPS components, etc. must be so designed that it gets easily accomodated in the IT Rack.
	ll). Auto SMS and Email to Locations: An Automatic SMS/Email shall be sent to locations from Retail Outlet regarding low stock of Tank & sales variation beyond $\pm 4\%$, reorder level in tank and density variation beyond $\pm 3 \text{ kg/m3}$.
6.2	RFID TAG READER
	a) RFID Tag readers would be mounted on the MPDs.Vendor to carryout installtions as per laid down procedures for jobs in petroleum installations. The tag reader should be fitted correctly so that it does not hang or fall at a later date.
	1) Operating temperature range: 0°C to 50°C
	2) IP 54 protection or higher required including LED and buzzer (IP 54 excluding buzzer requiring small aperture at bottom of Tag reader for the sound to come out)

Technical and Functional Requirement for Retail Automation	

Sr. No	Technical and Functional Requirement
	3) Should have RS 485 connectivity
	4) Tags should be of high quality to withstand daily use in forecourt environment.
	5) Tag writers, as required for ROs & their essential programming should be in the package.
	6) RFID Tag reader should be connected in parallel with Site Controller System. So that even if one tag reader is down,
	all Tags should not stop working and ultimately transactions should not stop.
6.3	EPS: (Electronic Payment Solution)
	a) There will be EPS residing at each RO for routing payment transactions to HDFC (BPCL s current acquirer Bank) Base
	24 Switch and VENDOR also to make EPS compatible for AMEX as an acquirer for routing transaction via AMEX cards
	during the TWO years from the date of signing of Agreement.
	b) EPS should reside on Site Controller System or EPS can be a single board solid state computer provided both should
	be housed in the same Closet. The payment solution should be EMV Level I certified and EMV Level II compliant.
	VENDOR will be responsible for EMV level II certification as required by the acquirer bank.
	c) It would be binding on the vendor to get their offered payment solution EMV II certified inline with norms prescribed
	by Indian banking Industry/ regulator during the project period of warranty & CAMC without any extra cost to BPCL.
	Needless to mention, the offered payment solution on date must satisfy existing banking, PCI DSS and RBI norms.
	d)The major features of EPS are as below:
	i)The solution should be based on Client-Server Architecture. The EPS system shall have the flexibility of configuring
	Client/Server on different devices
	ii) The EPS system should be based on Open Architecture.
	iii)The EPS offered should be EMV level 2 compliant.Whenever EMV level 2 certification is made applicable, vendor is
	required to get the certification done with acquirer bank or as applicable.
	iv)System should have switching capabilities to handle reversals, audit processes, hot card status to ensure total
	transaction & fraud control.
	v)EPS system should support industry standard ISO 8583 protocol format.
	vi)The system should make possible secure reading, transmitting and receiving of data for all transactions including
	Credit / Debit and Lovalty Cards. Vendor must integrate lovalty application with its solution (as required in Tender)
	creaty best and loyary eards. Vendor must integrate loyary appreation with its solution (as required in render).
	vii)The card information (data) should be carried in a secured way using 128 bit SSL encryption or triple DES security
	standards.
	viii)The system should have efficient queuing capabilities.
	ix)The EPS will reside on Site Controller System, as detailed in the tender irrespective of having thin or thick application
	on EDC/PAD. There should not be any reason for under- performance of system on this account.
	x)Evicting DAD torminals have adaguate moment and only around 1 MP of total available moment is presently used for
	Towalty application
	vi)Vendor to be fully acquainted with the RBL norms which have been implemented from 1st Oct 2013 It would be
	binding on vendor to be fully compliant to these norms. Seeking banking compliance in line with RBI's norms during
	the project period of warranty and AMC would be in Vendor's scope
	xii) No additional payment on account of setting up/using HSM, management of keys etc in complaince to the RBI
	mandated shall be paid by BPCL.
	Communication to Base 24 switch of HDFC and AMEX: Currently, HDFC is our acquirer bank and vendor should get
	the EPS certified with the bank. The routing of payment transactions via EPS to BASE 24 should based on Connect-
	Disconnect architecture. Above all, the EPS solution provided must be in line with the prevailing Banking Norms and
	Standards.
6.4	Network Router: Minumum Specifications
	i. Hardware Interface (Min) - One 10/100Mbps Ethernet Port for WAN or LAN
	Connection
	-One USB 2.0 (min) for CDMA / GPRS USB Modem
	ii. WAN - Supports 2G/3G/4G (UMTS/HSDPA/CDMA)
	- Must support CDMA / GPRS USB Devices currently used by BPCL
	- WAN: Static IP & Dynamic IP

Technic	Fechnical and Functional Requirement for Retail Automation		
Sr. No	Technical and Functional Requirement		
	iii. Functions - Port Triggering for Special Applications		
	- DDNS		
	- Virtual Server and DMZ VDN Dass Through (IDCas (PDTD)		
	- VEN Pass Infough (IFSec/FFIF)		
	iv. Management- Support for Remote Management		
	- Upgradable firmware		
	- DHCP Server		
	v. Security : Password Control		
	- NAT/NAPT IP Sharing		
	- Firewall, Anti-Dos Firewall		
	- MAC/ IP Filter and URL Blocking		
	vi. This router shall provide the gateway functionality for connectivity of currently available CDMA / GRPS/Broadband on the USB port and automatically connect to the respective service provider (ISP) network.		
	vii. The router should be able to priorities the bandwidth for credit card transactions, SMS, Automation data transfer, remote view, etc.		
	viii. Any software/ firmware up gradation shall be in vendor's scope during the entire project period of Warranty & CAMC and no additional payments shall be made on this account.		
	ix. The router should support all the major CDMA/GPRS connectivity dongles available in the market at the time of bidding. Any firmware/software upgrade needed in the router at the later stage for configuring new connectivity dongles/modems shall be in vendor's scope and no additional payment shall be made on this account.		
	x.The configuration should enable and support remote access of the sites. The remote view application (like dyn DNS services) that may be required shall be in the vendors scope including its services during the entire Warranty & CAMC project period. xi.At HOS, a separate page to be created for remote viewing, detailing the links for connecting to the sites remotely. The RO list to be indexed on the basis of Regions and territories.		
6.5	Automation software GUI for dealers/managers:		
6.3.1	i Forecourt configuration via GUI (through monitor) like definition of grades, tanks, fuelling points, payment devices, RFID tags and readers, service types/modes, etc.). BPCL may add or remove forecourt equipments at RO, vendor shall re-configure the automation solution accordingly during CAMC Support period without any additional cost. Please note during any Forecourt Equipment Augmentation, Removal etc. the work related to placement of equipments, LAN cables, conduits, power cables shall be taken care of by BPCL.		
	ii. MIS application in FCC: - Site Controller to be loaded with MIS application viewable through Monitor that suffice dealer management and also with integration with Site Controller System to capture and reflect DSM s name in every transaction and should also generate DSM wise reports.		
	 a. Site should have a user friendly RO level GUI showing live Tank stock and MPD status as approved by BPCL. VENDOR to ensure that the Tank GUI, based on the ATG console data, is integrated in the VENDOR s Automation GUI viewable at Monitor. If ATG system is enabled with online density functionality, the density should also be displayed in the GUI along with inventory details. In the main GUI nozzle status (fuelling, payment,offline) and tank status should be displayed in one window. b. The FCC GUI shall depict explicit graphical representation of current and Previous fuelling status, MPDS IN MANUAL MODE etc. besides complete Tank status representation. c. VENDOR to display VSAT/CDMA/GPRS Signal Strength in the FCC GUI, provided the GPRS, CDMA software 		
	provides option to extract data for display of Signal Strength. iv Site Controller System should be able to pull fresh Product prices from HQ System via option in Automation (FCC)		
	GUI for Dealer. v. In the FCC GUI, with due authorization, user should be able to do Forward Pricing (pre scheduling of price-changes), and an Audit Trail for the same to be maintained.		

Technic	Technical and Functional Requirement for Retail Automation	
Sr No	Technical and Functional Requirement	
51.110	vi. Site related configurations like site details, cash limits, unit of measures, methods of payment, currencies, cash print header and footer should be configured through Site controller GUI.	
	vii.To minimize the errors while confirming the manual bulk receipt, the volume entry should be restricted to the maximum tank capacity.	
	viii. Printable Bank Deposit Statement to be generated along with End of day performance to settle all financial transactions. System to send an Auto SMS and Auto Email to sales office and Finance controller if BDS do not match and/ or not entered in Site Controller GUI after making deposit of cash to respective Bank within 13-00 HRS IST of previous EOD Otherwise normal daily deposit records will be available in Site Controller and can be taken out as a report for specific duration (from to). For all this respective functionality, separate field in EOD to be created to enter the desired entries. (<i>Details About BDS Given in ANNEX-A</i>). The Cash Amount entered by Dealer in the BDS GUI in the FCC should match the Receivables as per fuelling, in case it doesn t match Auto SMS and Auto Email should be generated. Also this BDS related application part doesn t require any integration with the Bank, rather the Bank Details will be just a manual entry in the system. Dealer should be able to enter loyalty upload amount at the RO anytime before EOD.While in manual EOD, system to generate a pop up for entering loyalty upload amount if not confirmed earlier. Auto EOD to happen automatically without the pop-up.	
	xi Wet and Dry Stock control: a. Tanks control – i.e. Tank Stock Monitoring via various reports b. Fuel in stock c. Fuel deliveries d. Tank level adjustments Ullage, Product and Water Level Calculations e. 2T OIL sales accounting (even in absence of 2T totalizer)	
	xii Wet Stock Reconciliation: a. Reconciliation with Nozzle sales vs. tank stock b. Reconciliation with Tank sales vs. Tank stock, details to be decided while FSD finalisation.	
	The RO Inspection Report (ROIR) report shall have only details about the PURE PRODUCT SALES (excluding 2T OIL SALES) from Nozzles vis-à-vis Tank throughput. There shall be a separate report for 2T OIL sales. PLEASE REFER ANNEX-D & E FOR DETAILED REPORT FORMATS OF HQ AND RO LEVEL RESPECTIVELY.	
	xiii The site controller shall maintain Customer records in the database using vehicle number. A beep to be generated at the FCC in the event when a customer has taken 750lts (x) fuel in 3(y) fills in the last 75 (z) days, so that the RO Manager can greet the customer in person. The amount of fuel (x), no of fills (y) and days (z) should be configurable . Additionally, a SMS should be generated for all such customers and it should sent to the customer and dealer. It is also required to generate an monthly report stating the details of these customers with details to customer, BPCL Sales officer and dealer. The site controller should provide a user friendly GUI for New Customer Acquisition. (DETAILS IN ANNEX-A)	

Technic	Technical and Functional Requirement for Retail Automation		
Sr No	Sr. No. Technical and Functional Requirement		
51.10			
	xiv End of Day/ End of Shift which is a process carried out at a pre-scheduled time of the day in order to reconcile the sales/ stock/ cash etc during a particular period of time. The system should be configured to perform an auto EOD function at a scheduled time in a day concurrently with the operating process. It should be also possible to run the EOD/EOS process at any time of the day. An EOD should be performed		
	a. At a specified time of the day		
	h. As per RO convenience		
	c FOD time should be configurable & at that time the system should automatically perform FOD/FOS		
	concurrently with the operating process.		
	d. Auto EOD should happen when all the equipments are in ideal state so that the data capture is accurate. If some nozzle is in fuelling/operation mode when Auto EOD is initiated, system should wait for the fuelling to finish for carrying out auto EOD.		
	Auto Email should be generated to the concerned Sales Officer in case EOD does not happen in a span of 24 hrs.		
	xv.EOD report will be provided with details of the Batches on FCC. Provision to generate trial ROIR before generating		
	the final report.		
	A Comprehensive Audit Trail to be present in Automation software (as approved by BPCL) for tracking all the		
	transactions by various available parameters.		
	The System should also maintain the EOD Statement (Auto EOD / Manual EODs) which shall formed as a Report in		
	HO system.		
	(Details given in ANNEX A)		
	La ROIR generate at HO system for this scenario an indication (*) shall be provided on the specific day of the energy of the specific day of the energy of the specific day of the specifi		
	for the row with motor readings. The same anomaly details can be viewed on a separate report with details: Opening		
	reading, changed reading, calculated stock and remarks. At the bettern of POIP these old is new readings of totalizer		
	pozzla wise to appear		
	xvii.Site Controller should have an Internal Feedback System GUI in which BPCL officers can put in their		
	feedback/comments. The Feedback Captured in this should automatically get Transferred to HOS on EOD		
	Integration of connectivity mediums like CDMA,GPRS,Broadband & V-Sat: Vendor to ensure seamless connectivity		
6.6	using the connectivity medium (as provided by BPCL) to Head office Server set up, Loyalty server and acquirer bank		
	switch. Details have been mentioned in Vendor s scope of work.		
6.7	6. TFT Monitors		
6.7.1	Minimum specifications:		
	i. 17 widescreen TFT monitor		
	ii.600:1 (typical)contrast ratio,		
	iii.Response time -8ms		
	iv.1280 x 900		
	v.VGA or HDMI connectivity. Supply of VGA or HDMI cable is in the scope of vendor.		
	vi.Should deliver high quality digital image and excellent color uniformity.		
	vii.Easy monitor panel detachment from stand to support wall-mounting as per site requirements.		
	viii.Should support wireless mouse and keypad operations. The supply of wireless mouse and keypad is also included in the scope of vendor.		
	ix.Maximum length of the VGA/HDMI connectivity cable from FCC (depending on the site conditions)- 10 Mtrs. Monitor shall be directly connected to the FCC over VGA/HDMI and no PC shall be provided by BPCL.		

Technical and Functional Requirement for Retail Automation							
Sr. No	Technical and Functional Requirement						
7	Auto Email & Auto SMS : These two functionalities are based on the minimum stock level (MSL), reorder level (ROL), density variation and stock variation beyond 4% as stated above. The ATG will pick the product receipt. So, system should calculate the Tank stock from ATG & should not depend on entering of Bulk receipt & generate the Auto Email & SMS accordingly. The module for Auto SMS & Email should be configurable for No. of Tanks & stock level etc. During Sales vs. Stock reconciliation, if the variation is found to be + 4% or more, there should be an Auto SMS & Email sent to the supply location. The variation should be event triggered & not time triggered. The SMS & Email sent for first time should have heading as GENERATED & after 24 hours REMINDER-1 & REMINDER-2 and so on. After Delivery of product, system should automatically capture the tank status from ATG & need not wait for Bulk Receipt entering. The Sales Vs Stock variation should be auto-clear after first reporting from the system. This variation is based on EOS/EOD basis. The same should generate after system performs the EOD/EOS without human intervention at preset time. The alerts should be parameterized and user should be able to enable or disable any particular alert through HQ application.						
	The Auto Email/Auto SMS will follow escalation level as follows: a. First day Low stock – COCO manager/TE/SO b. Second day Low stock – COCO manager/TE/SO/IM; CC: TM c. Third day Low stock – COCO manager/TE/SO/IM/TM; CC:,GM/DGM,SMRE These escalations level to be parameterized and should be configurable through HQ application. The Auto SMS/Email regarding more than ± 4% variation will be go to COCO Manager/SO. For Auto SMS, BPCL s SMS gateway details and link will be shared for integration. For Auto Email, necessary SMTP IP address, Username, password & Email ID will be given by BPCL. Apart from these Auto SMS & Auto Email will also be required for the Following: • EPS failure • ATG offline • MPD Offline • EOD not Performed for more than 24 Hrs (Forced EOD to be performed and logic shall be finalized while conducting FSD) Note: The email IDs and the process flow should be configurable.						
8	Information system at RO (RO Reports)						

Sr. No	Technical and Functional Requirement
	a. Daily Product wise Sales based Report
	b. Audit Trail for Individual Transactions
	c. Shift reconciliation report
	d. Audit Trail for Price Change at RO Level
	e. Fuel Price Vs. Fuel Sold Breakup Report
	f. Vehicle No. Wise Report
	g. Hourly Tank Stock Report
	h. DSM Wise MOP Report.
	i. MOP Wise Report
	j. Dry Stock Report
	k. Exception Reports
	i. EPS failure
	ii. MPD offline
	iii. ATG failure
	1. Vehicle no wise & Segment wise Reports
	m. 2T Oil sale Report
	n. DSM Performance Report
	o. Nozzle Utilization Report
	p. Bulk Receipt Report
	q. 24 Hr. Wet Stock Sale Statistics (Graphic)
	r. 24 Hr. Wet Stock Sale Statistics (Numeric)
	s. Preset Vs actual delivered quantity report
	u. Retail outlet inspection report (ROIR): Fuel Reconciliation
	ROIR to take into account the following MDG parameters for Calculating Permissible Variation Quantity
	i. 4% of Closing Stock for all Products
	ii. Class A Product :
	0.75% on quantity sold up to an annual average of 600 KL
	0.60% on additional quantity beyond an annual average of 600 KL
	iii. Class B Product :
	0.25% on quantity sold up to an annual average of 600 KL
	0.20% on additional quantity beyond an annual average of 600 KL
	v. Product Wise Variation Report
	w. Monthly Totalizer Report
	x. Credit/Advance Party Deposit Details
	y. Detailed Credit/Advance Party Report
	z. Customer SMS site report
	aa. Bulk Receipt Report
	bb.Totalizer mismatch report

Technic	al and Functional Requirement for Retail Automation							
Sr. No	Technical and Functional Requirement							
	Other Reports: bb. Report on BDS (Bank deposit statement) with EOD - (Detailes Mentioned in ANNEX- A)							
	cc. Density register dd. Report on alerts from FCC regarding customers who have taken more than 750 lts in 3 months. ee. A Report on the amount of CENVAT and local sales taxes on each transaction as applicable according to H should be available on FCC. (Details On CENVAT Mentioned in ANNEX- A)							
	ff. A Report on new vehicles which were initially not in the HQ system but were entered on the particular date by DSM on the PAD or FCC through GUI on monitor. An Email for this report should also be generated at the end of day for the concerned BPCL officer.							
	gg. System to generate and store exclusive Exception reports for ATG (Product High/low, Power on off, High water levels, Density variation). It is implicit that Vendor can tap only those functionalities provided by ATG Console and supported by protocol provided by BPCL. It is understood that the vendor is thoroughly familiar with these ATG consoles and their protocols.							
	hh. Report on AUTO to manual mode (Format would be shared with the successful bidder) iiReport on change in K-Factor (Format would be shared with the successful bidder) jj.Fill size based report							
	kk: Note: Vendor to also provide graphical depiction of the reports wherever possible after discussions with BPCL.							
8.1	All reports should be easily imported at least <i>PDF</i> , <i>HTML</i> & <i>EXCEL</i> format for <i>MIS purposes</i>							
9	Information system at Head Office System (HOS Reports)							
9.1	Vendor should provide a head office application for connecting to sites for pushing/polling data. The connectivity of HQ system with the Retail outlet shall be done using GPRS/CDMA/Broadband through network router or V-SAT. All hardware requirements for hosting the Head Office application shall be procured by BPCL. The server architecture,OS,database details, etc shall be shared with the successful bidder.All other hardware & software required for ensuring seamless connectivity from Retail outlet to Bank, Loyalty server and Head Office system will be in							
	vendor s scope of work.							
9.2	Major Features of Head Office Application/System:							
9.2.1	The Head Office Application must enable sending of data to site i.e. push data regarding price change, RO closure, remote view etc. SFTP and secured Https based web services to be used for data transfer. For price change through HOS, SAP shall directly post the changed price in the HOS tables and vendor to devise mechanism to send these prices to the individula ROs. If the price change is unsuccessful at ROs, HOS system to generate the SMS/email alert to the concerned for all such ROs.							
9.2.2	The data from site should come automatically on EOD basis & no manual Import or data retrieval for HQ system and application will be entertained. Ro system should generate exception report if EOD does not happen.							
9.2.3	All or specified transactions at RO must hit the server in online fashion i.e. all transactions should be captured by server in Real-Time basis and an auto SMS should be sent to all those customers pre-identified through mobile, which fulfill the configurable delivery limit in terms of product volume or amount. This means threshold amount or volume should be configurable. The application should be able to store multiple mobile numbers of different customers data base at central server via EDC/PAD or FCC and connect those with particular vehicle number and or a group of vehicle numbers inserted at RO level while fuelling. The same SMS content should be configurable and to choose a particular message along with other details of fuelling like vehicle number, grade of fuel, quantity, value, date, time, name of RO, location of RO will be configurable. The server will maintain a master database of all							
	such customers.							

Technic	al and Functional Requirement for Retail Automation
Sr. No	Technical and Functional Requirement
9.2.4	A dashboard is planned to be developed for easy access of reports by the users. Few critical reports shall be taken under this separate DASHBOARD tab either in the same format or with some minor modification. The formats and the navigation to this dashboard in the HOS application would be finalized with the successful bidder
9.2.5	A log of users accessing the HOS application in along with date and time should be maintained in the system. This should also be available in form of territory. Region & HO wise report.
9.2.6	The Head Office System should generate following reports: 1. Daily Product Wise Sales based Report 2. Audit Trail for Individual Transactions 3. Audit Trail for Price Change at RO Level 4. Fuel Price Vs. Fuel Sold Breakup Report 5. Vehicle No. Wise Report- Option of multiple vehicles in single report 6. Preset Vs actual delivered quantity report 7. RO dry-out report 8. Hourly Tank Stock Report 9. Percentage tank stock report 10. DSM Wise MOP Report. 11. Product Wise MOP Wise Detailed Report 12. Dry Stock Report 13. Exception Report: a. Site Controller System failure b. Pump offline c. ATG failure 14. Vehicle Segment wise Report 15. 2T Oil sale Report 16. DSM Performance Report 17. Nozzle Utilization Report 18. Bulk Receipt Report 19. 24 Hr. Wet Stock Sale Statistics, Pump Wise (Numeric) 22. SAP Muirzer Report
	 23. Retail outlet inspection report (ROIR): Fuel Reconciliation as per BPCL Format (with MDG parameters) 24. Product Wise Variation Report a. RO wise format b. Consolidated report format 25. Monthly Totalizer Report 26. Credit/ advance Party Details 27. Product Wise MOP wise Detailed Report 28. Consolidated MOP wise report 29. Customer SMS Report 30. ROIR recon availability report 31. Price change Vs tank Stock analysis. a. RO wise report b. Territory wise Report closing stock Vs Nozzle sale comparison 33. Report on AUTO to manual mode (Format would be shared with the successful bidder) 34. Report on change in K-Factor (Format would be shared with the successful bidder) 35. Report on change in MPD date and time (Format would be shared with the successful bidder) 36. Totalizer mismatch report

Technic	Fechnical and Functional Requirement for Retail Automation					
Sr. No	Technical and Functional Requirement					
	The Head Office ROIRs are to be divided into i) Generic ROIRs (that can be generated and viewable by concerned					
10	BPCL user) and ii) Statutory ROIRs (that can be generated and viewed only by authorized BPCL users like Sales					
	Officers etc.) This Statutory ROIR cannot be rolled back once confirmed for submission					
11	Please submit compliance to Annexure : A,B,C,D,E (Attached In Tender Document)					

ANNEXURE- A : DETAILS OF BPCL REQUIREMENTS

1. BANK DEPOSIT STATEMENTS :

- a. At EOD, system should capture the declared amounts (for auto EOD, system totals will be treated as declared totals) for Cash, Credit/debit/Petro card, Cheque, NEFT and local account.
- b. Along with EOD/Shift report the Bank deposit statement to be printed.
- c. The format of the Bank deposit statement is to be provided by BPCL to the successful VENDOR.
- d. BPCL to provide the list of Banks to be configured at RO level for BDS entry.
- e. BDS should mention the totals for Cash, Credit/debit/Petro card, Cheque, NEFT and local account for the business day.
- f. Site Controller system will also capture BDS acknowledgement with actual bank deposit slip details to be entered before the next EOD.
- g. As an operational process, the deposit in the bank needs to be acknowledged in the system against the specific BDS before 13:00 hrs IST of the next business day.
- h. The business rules and operational process for Sunday/Public holidays has to be confirmed by BPCL.
- i. Site Controller system to send an auto SMS and auto e-mail to sales office and finance controller if BDS don't match.
- j. BPCL to provide the e-mail content, format and e-mail id(s).
- k. BPCL to provide the SMS content and format and SMS number(s).
- 1. A report to give BDS status for a selected time period (from Date and to date).

*The Cash Amount entered by Dealer in the BDS GUI in the FCC should match the Receivables as per fuelling, in case it doesn't match Auto SMS and Auto Email should be generated. <u>Also this BDS related</u> <u>application part doesn't require any integration with the Bank</u>, rather the Bank Details will be just a manual entry in the system.

2. CENVAT AND LOCAL SALES TAXES :

- a. BPCL to provide the details on types of Taxes and their definition including the % values.
- b. Site Controller system will maintain CENVAT and local sales tax types and their definitions at RO level.
- c. Printing of CENVAT and other local sales tax details on the cash memo shall be a input parameter at RO level.
- d. The sales tax is the service tax on CENVAT.
- e. CENVAT and other sales taxes are applicable for dry/wet transactions closing.
- f. FCC GUI generates a report on transaction wise tax charges and Tax wise totals for the site for the day.

3. NEW CUSTOMER ACQUISITION PROCESS

a. Basic requirement:

i. Pre Conditions:

- a. BPCL dealer/office-in charge wishes to register a new customer
- b. Customer should have at least one mobile number
- c. Customer should have at least one vehicle.
- d. The RO system is online with HQ system.

b. Limitation:

1. During the registration process, mobile number along with the Vehicle no of the customer acts as unique identification in the system. Multiple vehicle nos can be assigned to one mobile no however every vehicle should have only one mobile no.

ii. Process (at high level):For Registration:

- 1. When the customer fulfills the defined delivery limit /new customer acquisition criterion, Dealer/Office-in-charge captures the customer details at RO manually.
- 2. RO system validates the customer details (mobile numbers) and submits the request to HQ.
- 3. HQ system processes the request and generates a unique Identification number to the customer and gives a response back (if the RO system is online) that completes the registration process.
- 4. In offline status, the transaction is pending till the RO system is online.

iii. For generating SMS:

- 1. At RO, during EOD the transaction data sent to HQ.
- 2. At HQ, during scheduled/manual daily process, the HQ system runs through the transaction data and maps all vehicle numbered transactions against the registered customer master.
- 3. At HQ, define the volume/amount criteria for sending the SMS.
- 4. For the customer who fulfills the volume/amount criteria, an auto SMS will be sent.

c. Process (in Detail)

i. At RO Level in FCC GUI through Monitor:

1. When dealer/office-in-charge decides to register a customer, the RO system user opens 'New customer acquisition' interface in RO system, which should capture the below details.

Registration Number:	(Generated at HQ)
Transporter/Vehicle Owner:	(Mandatory)
Mobile Number(s):	
email IDs	

Contact Address:

Vehicle Number(s):

- 2. After filling the details, the user submits the request.
- 3. RO system validates the customer details (Mobile numbers) and sends to HQ system to get the customer registration number.
- 4. Receives the customer registration number and generates a registration receipt.
- 5. At EOD, the transaction data sent to HQ system.

ii. At HQ Level in HQ System

- 1. Further to customer Acquisition process under FCC Functionalities
- 2. Receives a request from RO for customer registration with necessary details
- 3. HQ system validates the data and generates a unique customer registration number.
- 4. At daily scheduled/manual process: The HQ system runs through the transaction data and maps all vehicle numbered transactions against the registered customer master.
- 5. Define the volume/amount criteria for sending the SMS.
- 6. For the customer who fulfills the volume/amount criteria, an auto SMS will be sent.
- 7. An interface will be provided to configure the SMS content (the message). The other details like vehicle number, grade of fuel, quantity, value, date, time, name of RO will be appended to this content.
- 8. HQ system should generate a report on transporter/vehicle owner name for the fuelling of linked vehicles to that account. The report should be generated on territory, State, Region, HQ wise.
- 9. HQ should generate reports based on the transporter name.
- 10. System should be able to send the consolidated weekly/monthly summary of fuelling transactions of all the customers on SMS.
- 11. It should be possible to centrally upload the aggregated list of customers at HOS GUI.
- 12. HOS GUI should also allow changing of mobile no or vehicle no in the system for the acquired / registered customers.

Central Customer Acquisition Module:

i. BPCL have already set up a central customer acquisition module. Vendor shall be required to integrate with this module for sending SMS of fuelling information. In case this module is set up, vendor shall send the transaction information to this central module either in the decided format or shall share the details of the their existing format for reading the information.

ii. The registration would happen by directly accessing the Web GUI of the central module through FCC OR Vendor's Customer acquisition module shall provide details of registration to the Central module instantaneously or periodically (every 6 hr-minimum)

4. HANDLING MPD CPU CARD CHANGE ANOMALY

For this instance, an interface will be provides at FCC system with the following details.

	Pump No
	CPU serial number
	RO call report number
	OPENING READING
	Electronic totalizer Reading
	Before changing the card
	After changing the card
	Mechanical totalizer Reading
	Before changing the card
	(Assumption: NO sale has been performed after recording this value in the call
тı	intenance report)
	After changing the card
	Remarks

In ROIR report at HQ system, for this scenario an '*' will be provided on the specific day of the anomaly for the row with meter readings. The same anomaly details can be viewed on a separate report with details: Opening reading, changed reading, calculated stock and remarks.

ANNEXURE- B

FORMAT FOR SERVICE LEVEL AGREEMENT FOR COMPREHENSIVE AMC SUPPORT PERIOD OF FOUR YEARS

INTRODUCTION:

This document stipulates the nature and level of service standards and support expected from the VENDOR/ Authorized Service Provider i.e. M/s _____ during post warranty CAMC Support Period of four (4) years for the maintenance of the Automation Systems installed at **5000 Ros** as a part of Tender No.______. This document also specifies the required uptime for the equipment supplied the level of training and other conditions like penalty provisions for the services not provided by M/s______ during the Comprehensive AMC Support Period of four (4) years.

1. SCOPE OF THE SERVICE LEVEL AGREEMENT:

The start of **CAMC SUPPORT PERIOD** for any RO shall be as per 'Methodology of Execution' explained in Special Purchase Conditions. Post warranty Comprehensive AMC support period shall be for Four (4) years.

Comprehensive AMC Support means that vendor should ensure smooth working of all the hardware & software components of the Automation Systems provided at ROs under the contract. The scope includes supply, integration & installation of hardware spares (as required) along with software (software updates/patches) support to be provided during the CAMC period to ensure smooth and satisfactorily working of Automation systems at the ROs and also to avoid downtime beyond permissible downtime. CAMC scope shall include site visits for attending BROMA complaints for Breakdown maintenance and ensuring contract deliverables. All this shall be covered for four **years** of Comprehensive AMC Support period. CAMC payments shall be done on quarterly basis as explained in 'Special Purchase Conditions' and NO additional PAYMENT other than this shall be done to the vendor towards CAMC support.

BROMA (Bharat Petroleum Retail Outlet Maintenance Application) is an online platform for dealers to record their maintenance related complaints and the information (SMS & email) is sent to the respective vendors through the system for corrective measures. Once the complaint is logged by dealers, the complaint downtime starts and is accounted till the complaint is resolved & closed by vendor in the system and certified by dealer/BPCL site in-charge. BROMA application has now been integrated with our internal business platforms like SAP. This ensures seamless & transparent transactions, zero-time loss and accurate documentation apart from ease of billing and closing maintenance calls.

All the maintenance calls regarding Retail Automation and CAMC uptime calculations shall be based on BROMA system only. Successful bidder shall be given training on BROMA operations for understanding the process flow.

a. It is mandatory for VENDOR to maintain sufficient Spares at its respective State Level Offices in consultation with BPCL

- b. Any parts & components changed during Warranty Support period will carry an additional warranty (for those particular parts/component) for another three months from date of replacement or residual warranty period of the Automation System whichever is later.
- c. The Service Provider will carry out breakdown maintenance as and when required/ informed by BPCL in-charge/ Dealer representative/concerned Territory Office through BROMA and arrange for spare parts required, if any, immediately.
- d. Service Requests will be done anytime during the day by BROMA only.

2. RECOVERY FOR RO DOWNTIME:

VENDOR to ensure that the uptime of RO Automation system is at least 98%. Rs.500 per day per Retail Outlet beyond 2% permitted downtime beyond 24 hrs (complaint resolution time) for failures including partial failures calculated over 3 months (90 days). The same will be calculated and recorded in BROMA.

For CAMC Support period, down time calculation will be as under:-

A. Period of calculation: Quarterly (90 Days)

B. Unit of measurement: Each RO

C. RO's downtime: A RO automation, partially or fully has remained nonfunctional for number of days in 3 months (90 days).

D. Permissible downtime in RO days for each RO = 2% of a half year ,i.e. 0.02*90days

E. Penalty calculation for a Quarterly (90 Days) = (C-D)* Rs. 500/- in case (C) > (D)

- 3. The Service Provider shall procure and maintain sufficient spare inventory on their own and stock the same at their service offices. This will prevent any unnecessary delay in responding to the complaints logged.
- 4. A 'Breakdown Rectification Report' shall be sent to the respective BPCL Territory Engineer on the Maintenance work carried out. The report shall include the following details:
 - a. Details of repair work carried out
 - b. Reasons for the failure/ fault and methods suggested for preventing the same.
 - c. Details of parts replaced if any
 - d. Date and Time of call logging/Service Request.
 - e. Date and Time of response by the Service Provider
 - f. Date and Time when rectification was completed by the Service Provider
 - g. Signature of the personnel attending the call
 - h. Counter signature of the Dealer/ BPCL representative

A copy of the same shall also be kept at the RO for records.

2. DURATION OF THE AGREEMENT:

3. GENERAL TERMS AND CONDITIONS

3.1 Electricity, water and compressed air if required for carrying out maintenance at the R.O. will be provided by Bharat Petroleum Corporation, free of cost.

3.2 M/s._____ will ensure that their service representatives while working at BPCL outlets will observe all safety rules and regulations and statutory acts of Central/State Governments/Municipal Corporations or any other Government bodies. M/s______ shall furnish all labour, material, equipment, tools and tackles required for the rectification / maintenance job.

5. **RESPONSIBILITY**:

The vendor shall be solely responsible for any omission/ delay on the part of his Service Provider during the CAMC Support period and will be liable to pay Compensation charges as stipulated earlier.

For the Vendor

For the Service Partner

Place

Date



ANNEX-D AUTOMATION REPORT TEMPLATES

Please Note: All these reports mentioned below are sample reports and shall serve as a template to guide vendor in solution for Reports. However the final reports are to be approved by BPCL approval and subject to customization. The following Report Templates do not cover all the Reports mentioned in the document. Balance formats to be devised by successful vendor after approval from BPCL

HQ LEVEL REPORTS

FOLLOWING MINIMUM INPUTS MUST BE THERE FOR GENERATING ANY REPORT

REGION	<input field=""/>	NR, ER, SR,WR		
TERRITORY	<input field=""/>	TERRITORY CODE		
RO SAP CC	<input field=""/>	RO IS EASILY SEARCHEABLE BY INPUTTING FEW LETTERS OF NAME		
FROM-TO Options * (wherever applicable)	<calender format></calender 	SOME OTHER REPORTS MAY REQUIRE "AS ON" etc.		

*Essentially in the HQ system, with due authorization, user should be able to Generate Reports at RO level / Territory Level/ Regional Level. Reports to have sub-totals as required.

ALL THE OUTPUT REPORTS MUST HAVE FOLLOWING MINIMUM HEADER DETAILS

REPORT DESCRIPTION:				
RETAIL OUTET NAME:				
RO SAP CC :				
TERRITORY :				
FROM TO : <date &="" time=""> (*as applicable)</date>				
REPORT GENERATED ON : <date&time></date&time>				

PRINT OPTION SAVE OPTION

PRODUCT	DATE	DAY	RATE/	SALE	AMOUNT			
			LTR	(Ltr.)	(Rs.)			
SPEED	PEED 5-Jun-09 FRI 4		47	1000	47000			
	6-Jun-09	SAT	47	500	23500			
	7-Jun-09	SUN	47	300	14100			
	8-Jun-09	MON	47	2000	94000			
DIESEL	5-Jun-09	FRI	35	10000	350000			
	6-Jun-09	SAT	35	5000	175000			
	7-Jun-09	SUN	35	3000	105000			
	8-Jun-09	MON	35	20000	700000			
HI- SPEED	5-Jun-09	FRI	39	700	27300			
	6-Jun-09	SAT	39	350	13650			
	7-Jun-09	SUN	39	210	8190			
	8-Jun-09	MON	39	1400	54600			
PETROL	5-Jun-09	FRI	45	1500	67500			
	6-Jun-09	SAT	45	750	33750			
	7-Jun-09	SUN	45	450	20250			
	8-Jun-09	MON	45	3000	135000			
DALLY DRODUCT MALE CALLEC DACED DEPORT								

DAILY PRODUCT WISE SALES BASED REPORT

S.No.	Receipt No.	Product	Amount (Rs.)	Volume (ltr)	Rate/Ltr	Method of Payment	Date & Time	DSM Name	MPD No/MPD Side	Global Nozzle No	Vehicle No	Vehicle Segment
1	2345	Petrol	2000	44.44	45	Cash	1-Jun-09 10:00PM	RAM	2⁄1	5	DL4CU1602	CAR
2	2346	Diesel	1200	34.29	35	Credit/Debit Card	1-Jun-09 10:20PM	SHYAM	2⁄2	6	UP16M8791	HCV
3	2347	Speed	500	10.64	47	Petro/Reet Card	1-Jun-09 10:30PM	AMT	1/2	1	DL31U1601	TWO-WHEELER
4	2348	H-Speed	1000	25.64	39	Cash	1-Jun-09 10:40PM	AMT	1/2	2	RJ3CU2212	LCV
5	2349	Petrol	100	222	45	Cash	1-Jun-09 10:50PM	RAM	1/1	3	RJ3CX2215	TWO-WHEELER

.

Note: Advance filtering based on vehicle segment, MOP, Product, MPD ID, Vehicle No, Date & Time (option to choose range), Amount (option to choose the range) & Volume (option to choose the range)

AUDIT TRAIL FOR INDIVIDUAL TRANSACTIONS:-- User to have Search Options in various Fields

RONAME	ROSAPCC	TERRITORY	PRODUCT	OLDPRICE	NEWPRICE	LOGINBY	DATE AND TIME OF PRICE CHANGE INPUT	PRICE CHANCE EFFECTI FROM
-RONAME>	123456	DELH	SP⊞D	50	47	DEALER	01-Jun-09 10:00 PM	02-Jun-09 00:00AM
			PETROL	47	45	DEALER	01-Jun-09 10:01 PM	02-Jun-0900:00AM
			DIESEL	37	35	ADMN	01-Jun-09 10:05 PM	02-Jun-0900:00AM
			HG-5PEED	40	37	ADMIN	01-Jun-09 10:00 PM	02-Jun-09 00:00AM

AUDIT TRAIL FOR PRICE CHANGES AT RO LEVEL<mark>:</mark> User to have option of selecting multiple ROs/Territories.

PRODUCT	OLD PRICE	NOZZLE PRODUCT SOLD @ OLD PRICE	NEW PRICE	NOZZLE PRODUCT SOLD @ NEW PRICE
SPEED	50	3000	47	6600
PETROL	47	15000	45	33000
DIESEL	37	20000	35	44000
HI-SPEED	40	2000	37	4400

FUEL PRICE VS FUEL SOLD BREAKUP REPORT

		Count of	Volume	
Vehicle No	Product	Transaction	(Ltrs)	Amount (Rs)
DL4CU1603	Petrol	5	70	5110

VEHICLE NO WISE REPORT. The Hyperlink under the number of times fuelled should connect to all Individual Fuellings against that vehicle No.

			PRESET		ACTUAL DELIVERED	ACTUAL DELIVERED		VEHICLE	DSM_NAM
NOZZLE_ID	BAY	TRX_DATE	TYPE	VALUE	AMOUNT	VOLUME	DIFF	_NO	Ε
		29/04/2013						DL01BM2	
1	1/1	02:54:02	AMOUNT	1500.00	808.90	16.62	691.10	011	JAIBIR
11	3/1	29/04/2013	VOLUME	10.00	654.79	9.90	0.10	DL03GH2	RAMNARES

10:55:00

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Preset Vs actual delivered quantity report : User should be able to generate product wise (all,

individual or group wise) report for a day, week, month of desired period. Report to additionally include product and mobile no (if the customer is acquired) suitably.

Name Of the RO	Product	Tank No	Tank Capacity	Current Volume	Date & Time
ABC Filling					
station	Petrol	2	20000	1000	22.03.2013, 1600 hrs

RO Dry-out report : User should be able to generate report for a desired period for RO, territory or Region. The report should also be generated on product wise where consolidated tankage and capacity and current volume is shown.

S.No	Tank ID	Product	Tank Capacity (Ltrs)	Allowed Minimum Vol. (Ltrs)	Current Tank Vol. (ATG) (Ltrs)	ATG Reading Date/Time	Density (Manual) (KG/M3)
1	1	SPEED	20000	2000	15000	01-Jun-09 01:00PM	727.2
2	2	PETROL	45000	4500	24500	01-Jun-09 01:00PM	725.2
3	3	HI-SPEED	20000	2000	10000	01-Jun-09 01:00PM	820.7
4	4	DIESEL	45000	4500	30000	01-Jun-09 01:00PM	815.9
5	1	SPEED	20000	2000	14000	01-Jun-09 02:00PM	727.2
6	2	PETROL	45000	4500	24000	01-Jun-09 02:00PM	725.2
7	3	HI-SPEED	20000	2000	9500	01-Jun-09 02:00PM	820.7
8	4	DIESEL	45000	4500	30000	01-Jun-09 02:00PM	815.9

Hourly Tank Stock Report: The Allowed minimum volume should be configurable

Name of the RO	PRODUCT	Tank capacity	Current Volume	% Volume	Last reading date & time	Last settlement date & time
M/c AAA	DIESEL	15000	6308	42.05	29/01/2013 22:00:16	29/01/2013 23:39:00
M/S AAA	PETROL	15000	4233	28.22	29/01/2013 22:00:16	29/01/2013 23:39:00

Percentage tank stock report- *Individual RO wise report*. It should be possible to generate a report for a particular hour (7,8,9 AM and PM) in last two days. The system should allow to generate the report on the basis of these hours.

		Petrol		DIESEL			SPEED			
		Total	Tank		Total	Tank		Total	Tank	
TERR CODE	TERR NAME	tankage	stock	%	tankage	stock	%	tankage	stock	%
1401	Manmad Retail T'ry									
1403	Mumbai Retail T'ry									

Percentage tank stock report- *Territory wise summary report.*

	Customers Fuelled (No.)					Method Of Payment (Rs.)						
DSM Name	DSM ID	MS	HSD	Speed	HI-Speed	Total Customers Fuelled	Cash (A)	Petro/ Fleet Card (B)	Credit/ Debit Card (C)	Total Amount (A+B+C)	Self	Test
RAM	1	3460	153	6664	21	10298	105089.00	40090.20	1000.00	146179.20	2215.00	100.00
SHYAM	2	7	2399	23	335	2764	245101.70	54671.00	1500.00	301272.70	100.70	0.00
RAVI	3	12241	477	23492	164	36374	331544.40	0.00	48500.00	380044.40	979.50	218.40
MANOJ	4	3854	30	6675	43	10602	102794.20	15720.00	55000.00	173514.20	244.00	0.00
		19562	3059	36854	563	60038	784529.30	110481.20	106000.00	1001010.50	3539.20	318.40
	CUSTOMER %AGE CONTRIBUTION			MOP PERCENTAGE CONTRIBUTION								
		32.58	5.10	61.38	0.94		78.37	11.04	10.59			

DSM WISE MOP report. *These Reports to also Indicate the Shift No.*

				PRODUCT				
		SPEED	PETROL	HI-SPEED	DIESEL	TOTAL		
NOZZLE PRODUCT SALES	(Ltrs.)	8000	20000	5000	40000	73000		
CUSTOMERS (Nos.)		500	2000	250	500	3250		
%AGE CONTRIBUTION	%NOZZLE PRODUCT SALE	10.96	27.40	6.85	54.79			
	%CUSTOMERS	15.38	61.54	7.69	15.38			
TOTAL FUEL SOLD AMOUN	T (Rs.)	23500.00	90000.00	9250.00	17500.00	140250.00	MOP %A	GE CONTRIBUTION
	CASH Amt.	11750.00	54000.00	4625.00	5250.00	75625.00	53.92	CASH Amt.
	CASH Count	200	1500	100	300	2100	64.62	CASH Count
	CREDIT/ DEBIT CARD Amt.	9400.00	27000.00	3700.00	1750.00	41850.00	29.84	CREDIT/ DEBIT CARD Amt.
METHOD OF PAYMENT	CERDIT/DEBIT CARD Count	200	300	50	0	550	16.92	CERDIT/DEBIT CARD Count
	PETRO/ FLEET CARD Amt.	2350.00	9000.00	925.00	10500.00	22775.00	16.24	PETRO/ FLEET CARD Amt.
	LOYALTY CARD Count	100	200	100	200	600	18.46	LOYALTY CARD Count
	Count(Nos.)	10	5	4	2	21		
SAMPLING	Vol. (Ltrs)	30	10	8	4	52		
	Amt. (Rs.)	1410.00	450.00	296.00	140.00	2296.00		
	Count (Nos.)	0	0	10	20	30		
OWN USE	Vol. (Ltrs)	0	0	200	300	500		
	Amt. (Rs.)	0.00	0.00	7400.00	10500.00	17900.00		

PRODUCT WISE, MOP WISE DETAILED REPORT

S.No	DryStock Item Code	Item Details	Qty Sold	Rate	Amount
1	1234	MAK 2T Lube	3	200	600
2	3456	MAK 4T Lube	3	300	900

DRY STOCK REPORT

	TYPE OF EXCEPTION
	Site Controller Failure
	ATG Failure MPD Failure etc.
REGION	1100
TERRITORY CODE	1102
RETAIL OUTLET SAP CC	123456

Site Controller Failure					
RO Details	Territory	RO SAP cc	RO Equipment & ID	Alarm Details	Alarm Date Time
BPCL RO Name	Meerut	123456	Site Controller ID No. 1234	Power Off	01.Jun.09 10:35pm
BPCL RO Name	Meerut	145237	Site Controller ID No. 7845	Power Off	03.Jun.09 01:35pm

MPD Failure					
RO Details	Territory	RO SAP cc	RO Equipment & ID	Alarm Details	Alarm Date Time
BPCL RO Name	Delhi	132552	Gilbarco 3x6x2 MPD ID 1	MPD Offline	01.Jun.09 11:35pm
BPCL RO Name	Delhi	112345	Gilbarco 2x4x4 MPD ID 2	Communication	03.Jun.09 02:35pm
				Failure	

EXCEPTION REPORT

Vehicle	Total	Total Fuel	Total Fuel Sold
Segment	Customers	Sold (Ltrs)	Amount (Rs.)
CARS	100	1500	67500
HCV	20	2000	70000
LCV	50	1500	52500
Two Wheelers	100	500	23500
Agricultural	10	500	17500
	280	6000	231000

VEHICLE SEGMENT WISE REPORT

MPD	MPD	Nozzle No	MAIN	:	2T Oil Sold Vol (Ltrs)			TOTAL 2T OIL Sold
	No/Side		PRODUCT	2%	3%	4%	5%	Vol. (Ltrs)
Dresser Wayne 2x4x4 2T	3/1	10	PETROL	10	40	5	10	65
Dresser Wayne 2x4x4 2T	3/2	11	PETROL	5	35	0	5	45
	-	-						110

2T-OIL SALE REPORT

DSM %age Contribution

														1
S.No	DSM Name	DSM ID	Total Custome rs Attended	Total Fuel Sold (Ltrs)	Total Fuel Sold Amount (Rs)	Petrol Vol Sold (Ltrs.)	Petrol Amount (Rs.)	Speed Vol Sold (Ltrs)	Speed Amount (Rs)	Hi-Speed Vol Sold (Ltrs.)	Hi-Speed Amount (Rs)	% age Customers Attended	%age Fuel Sold	%Age Fuel Sol d Amount
1	Ram	1	1000	10200	456960	7140	321300	2040	95880	1020	39780	27	19	20
2	Sham	2	2000	30000	1344000	21000	945000	6000	282000	3000	117000	54	57	57
3	Mohan	3	300	6000	249600	1800	81000	600	28200	3600	140400	8	11	11
4	Ravi	4	400	6800	288320	2040	91800	1360	63920	3400	132600	11	13	12
			3700	53000	2338880	31980	1439100	10000	470000	11020	429780			

DSM PERFORMANCE REPORT *These Reports to also Indicate the Shift No.*

S.No	MDP No /Side	MPD	Global Nozzle No	Product Name	Total Customers	Avg. Customers Per Day	Total Vol Sold (Ltrs)	Avg. Vol Sold (Ltrs)	Total Sold Amount (Rs.)	Avg. Sold Amt (Rs.)
1	1/1	Gilbarco 2x4x2	1	DIESEL	200	50	3000	750	105000	26250
2	1/1	Gilbarco 2x4x2	2	HI-SPEED	400	100	6000	1500	234000	58500
3	1/2	Gilbarco 2x4x2	3	DIESEL	100	25	1500	375	52500	13125
4	1/2	Gilbarco 2x4x2	4	HI-SPEED	150	38	2250	563	87750	21938
5	2/1	Dresser Wayne 3x6x2	5	DIESEL	100	25	2000	500	70000	17500
6	2/1	Dresser Wayne 3x6x2	6	HI-SPEED	400	100	6000	1500	234000	58500
7	2/1	Dresser Wayne 3x6x2	7	SPEED	600	150	9000	2250	423000	105750
8	2/2	Dresser Wayne 3x6x2	8	DIESEL	150	38	2250	563	78750	19688
9	2/2	Dresser Wayne 3x6x2	9	HI-SPEED	100	25	1500	375	58500	14625
10	2/2	Dresser Wayne 3x6x2	10	SPEED	120	30	1800	450	84600	21150
					2320	58	35300	8825	1428100	35703

NOZZLE UTILIZATION REPORT: This report should be based on the product. It should also indicate

the % against each nozzle.

S.No.	Product	Receipt Date and Time	Invoice No.	Tank ID	Invoice Quantity (Ltr)	Invoice Density (Kg/m3)	Observed Density (Kg/m3)	ATG Receipt Reading (Ltrs.)	Manual Entry of Receipt (Ltrs.)
1	DIESEL	01-June-09 @ 10:00 am	123456789 0	2	12000	820.22	820.12	11700	12000
1	SPEED	02-June-09- @ 11:00 am	144456789 0	2	12000	820.22	820.12	8000	9000
1	PETROL	03-June-09-@11:00 am	155456789 0	2	12000	820.22	820.12	11900	12000
	-								

Bulk Receipt Report



24 Hr. Wet-Stock Sale Statistics- Graphical

Hours	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Average
0-1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1-2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2-3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3-4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4-5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5-6	134.92	17.80	47.00	66.34	131.07	90.76	16.45	72.05
6-7	3,653.17	2,330.82	3,737.47	2,227.44	4,254.83	2,944.98	2,383.35	3,076.01
7-8	5,965.54	4,076.02	5,301.47	4,203.76	6,428.85	4,440.22	3,536.50	4,850.34
8-9	5,539.03	5,347.23	5,365.36	4,425.25	6,027.25	5,689.99	3,613.49	5,143.94
9-10	7,291.31	7,391.96	8,371.96	6,067.35	8,970.02	7,399.72	6,006.75	7,357.01
10-11	9,141.73	7,948.54	8,041.65	7,068.33	11,464.52	9,155.55	7,377.97	8,599.76
11-12	8,561.87	8,326.04	8,539.71	8,307.18	10,696.14	11,024.27	8,418.20	9,124.77
12-13	7,932.51	6,800.38	7,645.77	8,184.50	9,543.34	10,920.69	8,196.53	8,460.53
13-14	5,960.29	6,201.58	7,424.47	6,259.03	10,170.70	8,664.82	8,275.39	7,565.18
14-15	6,766.47	5,612.52	6,751.45	6,119.84	8,184.39	9,918.13	7,217.03	7,224.26
15-16	6,957.83	5,984.95	6,559.28	5,695.52	8,505.17	9,642.38	7,051.25	7,199.48
16-17	7,423.48	5,594.20	6,517.86	6,474.41	8,504.79	7,980.81	7,062.24	7,079.68
17-18	7,333.35	6,220.51	7,068.52	7,566.95	9,637.41	10,731.70	7,281.20	7,977.09
18-19	8,847.78	6,452.81	8,732.03	7,629.94	10,289.29	9,432.37	7,338.14	8,388.91
19-20	8,376.61	7,809.44	6,981.94	6,863.87	10,545.87	7,918.49	7,473.42	7,995.66
20-21	8,441.14	6,925.60	7,934.75	7,005.95	10,277.14	8,351.10	7,243.57	8,025.61
21-22	7,183.92	5,546.75	7,312.39	5,771.48	8,858.18	6,971.77	7,164.15	6,972.66
22-23	3,931.80	3,692.12	4,167.96	4,882.68	6,796.28	5,859.95	5,538.57	4,981.34

24 Hr. Wet-Stock Sale Statistics- Numeric : User should be able to generate product wise (all,

individual or group wise)report for a day, week, month of desired period.

In	voice Deta	ils	Trucklo	nyIn Qt	n Out Product Grade Product Qty in Itrs Density (kg/m8)									
Ex. SAP (A)	Ex.RO (a)	Date Time (B)	Depot Out (C)	ROIN(c)	Ex SAP (D)	Ex RO (d)	Ex AP (E)	RO Entere d(e)	ATG pick (e')	Dff F≓(Ŀ e)	Ex.SAP (G)	Correc tect on Invoic e(G)	Observed at RO(g)	Diff (Gg) ar (G-g) =H
1102073658	1102073658	15-APR-2009 16:53:43	15-APR-2009 18:19:00	15-APR-2009 21:00:00	SPEED (ELROIII)	SP⊞D	6000	6000	5905	0	751.6	751.6	752.5	-0.9
1102073658	1102073658	15-APR-2009 16:53:43	15-APR-2009 18:19:00	15-APR-2009 21:00:00	HSD(ELROIII)	DIESEL	6000	6000	5963	0	829.9	829.9	829.7	0.2
1102073710	1102073710	16-APR-2009 13:02:51	16-APR-2009 15:07:10	16-APR-2009 17:00:00	MS(ELROIII)	PETROL	6000	6000	5917	0	751.6	751.6	752.9	-1.3
1102073710	1102073710	16-APR-2009 13:02:51	16-APR-2009 15:07:10	16-APR-2009 17:00:00	HSD(ELROIII)	DIESEL	6000	6000	6038	0	829.9	829.9	830.7	-0.8
1102073727	1102073727	17-APR-2009 10:27:00	17-APR-2009 11:41:57	17-APR-2009 14:00:09	HSD(ELROIII)	DIESEL	12000	6000	12154	6000	829.9	829.9	830.4	-0.5
1102073727	1102073727	17-APR-2009 10:27:00	17-APR-2009 11:41:57	17-APR-2009 14:00:18	HSD(ELROIII)	DIESEL	12000	6000	12154	6000	829.9	829.9	830.4	-0.5
1102073797	1102073797	18-APR-2009 12:23:52	18-APR-2009 15:16:45	18-APR-2009 18:00:00	M5 (BLRO III, 5%) B)	PETROL	6000	6000	5918	0	753.1	753.1	754.2	-1.1
1102073797	1102073797	18-APR-2009 12:23:52	18-APR-2009 15:16:45	18-APR-2009 18:00:00	HSD(ELROIII)	DIESEL	6000	6000	5945	0	829.9	829.9	830.7	-0.8
1102073876	1102073876	20-APR-2009 16:43:46	20-APR-2009 18:35:11	20-APR-2009 20:30:49	HSD(ELROIII)	DIESEL	12000	6000	11928	6000	830.3	830.3	830.9	-0.
	DOD D	EPOPT												





Retail Outlet Inspection Report(Recon) (01/02/2014 21:01:32 To 10/02/2014 21:00:29)

RO Name: BP-BKC RO SAPCC: 142814 ME ID: ME0000006386 Territory: Mumbal City: MUMBAI Avg. Annual Sale: Below 600KL Generated By: riteshcotis on 21/02/2014 06:43:38 from IP 10.80.12.120

Product Wise & Nozzle Wise Sales:

Product Name	MPD	MPD No /Side	Nozile	Opening Reading (A) (Uns)	Closing Reading (B) (Uns)	Tealing City (C) (Line)	Total 2T Sale (0) (Ltre)	Pump Sales (E=B-A-C) (Lins)	POS Sales (Without 2T) F(Line)	(Pump-POS) Sales(E-P) (Lins)
DIESEL	GIL 4P10H12D	1/1	DHM1-51-N2	970719.10	996426.60	15.00	0.00	25692.70	25692.73	-0.05
DIESEL	64L 4P*0H*2D	1/2	DI-M1-52-N6	321791.50	331511.00	20.00	0.00	9699.50	9699.49	0.01
DIESEL	64L 4P10H12D	2/1	DHM9-61- N10	812943.80	843343.40	20.00	0.00	30379.60	30379.53	0.07
DIESEL	64L 4P10H12D	2/2	DHM2-53- N14	500104.80	509017.10	20.00	0.00	25662.30	25662.00	0.00
DIESEL	64L 4P10H12D	571	DHW3-61- N20	551262.20	\$52853.30	76.63	0.00	2494.27	2494.20	0.07
DIESEL	4P10H12D	5/2	DH#3-63- N24	202446.50	232546.20	30.00	0.00	69.70	69.74	-0.04
DIESEL	GIL 4P10H12D	4/1	DHM4-51- N25	1140424.20	1109102.40	10.30	0.00	20667.90	20667.85	0.04
DIESEL	GIL 4P*0H*2D	4/2	DHM4-53- NS2	290331.20	399228.60	10.00	0.00	667.90	667.53	0.07
HESPEED	GIL 4P10H12D	171	HS-MI-S1- N1	386767.70	386787.70	0.00	0.00	0.00	0.00	0.00
HESPEED	64L 4P10H12D	1/2	HS-M1-53- NS	221455.30	221455.30	0.00	0.00	0.00	0.00	0.00
HESPEED	GIL 4P10H12D	4/1	HS-M4-51- N27	41543.30	41543.30	0.00	0.00	0.00	0.00	0.00
HESPEED	GIL 4P10H12D	4/2	HS-84-53- N34	10204.20	13284.20	0.00	0.00	0.00	0.00	0.00
PETROL	64L 4P10H12D	171	PE-M1-51- N3	273643.50	279399.50	32.29	0.00	6723.71	5723.74	-0.03
PETROL	GIL 4P10H12D	1/2	PE-M1-63- N7	452925.10	402294.40	20.00	0.00	9349.30	9349.29	0.04
PETROL	GIL 4P*0H*2D	2/1	PE-M3-61- N11	305191.50	311143_40	20.00	0.00	5601.90	5951.88	0.02
PETROL	4P10H12D	2/2	PE-M9-63- N15	510322-20	519635.60	19.95	0.00	9494.45	9494.44	0.01
PETROL	GIL 4P10H12D	3/1	PE-M3-51- N19	90104.80	90104.60	0.00	0.00	0.00	0.00	0.00
PETROL	GIL 4P10H12D	3/2	PE-M3-62- N23	317003.00	330536_40	20.00	0.00	13513.40	10513.40	0.00
PETROL	64L 4P10H12D	471	PE-M4-61- N26	949098.00	966110.20	25.01	0.00	16967.19	16967.17	0.02
PETROL	61L 4P10H12D	4/2	PE-M4-62- N30	008792.80	019290.40	20.00	0.00	10477.60	10477.58	0.02
SPEED	GIL 4P10H12D	1/1	SP-M1-S1- N4	222927.90	223118.30	20.00	0.00	170.40	170.44	-0.04
SPEED	64L 4P10H12D	1/2	6P-W1-52- N8	107357.50	167544.60	20.00	0.00	167.10	167.07	0.00
SPEED	61L 4P10H12D	2/1	SP-M2-S1- N12	15848.30	10192.90	20.00	0.00	326.60	328.57	0.03
SPEED	GIL 4P10H12D	2/2	6P-M3-63- N16	01686.00	32256.50	30.00	0.00	\$40.50	540.55	-0.05
SPEED	64L 4P10H12D	571	SP-M3-S1- N10	10107.70	19055.40	20.00	0.00	647.70	847.76	-0.05
SPEED	GIL 4P*0H*2D	3/2	SP-M3-62- N22	17400.00	18106.00	30.00	0.00	567,40	567.47	-0.07

SPEED	GIL 4P*8H*2D	4/1	8P-M4-81- N25	65478.80	65478.80	0.00	0.00	0.00	0.00	0.00
SPEED	GIL 4P*8H*2D	4/2	8P-M4-82- N29	31980.90	32335.40	30.00	0.00	324.50	324.50	0.00
SPEED 97	GIL 4P*8H*2D	2/1	897-M2-81- N9	5396.30	5416.30	20.00	0.00	0.00	0.00	0.00
SPEED 97	GIL 4P*8H*2D	2/2	897-M2-82- N13	43560.00	44492.70	20.00	0.00	912.70	903.18	9.52
SPEED 97	GIL 4P*8H*2D	3/1	897-M3-81- N17	3358.60	3500.20	20.00	0.00	121.60	121.58	0.02
SPEED 97	GIL 4P*8H*2D	3/2	897-M3-82- N21	686.80	686.80	0.00	0.00	0.00	0.00	0.00

Individual Tank Wise Stock & Sales vs Connected Nozzle Sales:

Product Name	Tank NoJCapaolty(Ltr 6)	Opening Stock (A) (Ltrs)	Bulk Receipt (Manual) (B) (Ltrs)	Bulk Receipt (ATG) (C) (Ltrs)	Closing Stook (D) (Ltrs)	Total Tank Sales (E=A+B- D) (Ltrs)	Total Pump Sales (F) (Ltrs)	Variation (G=F- E)
DIESEL	5 / 20000	14779.00	120000.00	110459.00	8832.00	125947.00	115753.57	-10193.43
HI-SPEED	1 / 10000	4096.00	0.00	0.00	4096.00	0.00	0.00	0.00
PETROL	4 / 20000	14790.00	75000.00	69658.00	13034.00	76756.00	71477.55	-5278.45
SPEED	3 / 20000	9759.00	0.00	0.00	6785.00	2974.00	2964.20	-9.80
SPEED 97	2 / 10000	2833.00	5000.00	4922.00	6801.00	1032.00	1034.30	2.30

Product Wise Stock & Sales Reconciliation of Retail Outlet:

Produot Name	Total Tank Capaolty(L trs)	Opening Stook of All Tank Ex.ATG(N) (Ltrs)	Total Bulk Receipt Ex.Manual (O) (Ltrs)	Total Bulk Receipt Ex.ATG (P) (Ltrs)	Total Closing Stook of all Tank Ex.ATG(Q) (Ltre)	Totai Sales Based On Tank (R)=N+O-Q (Ltrs)	Total Sales Based On Nozzie throughpu t (8) (Ltrc)	Variation T=8-R	Permissibi e Variation on +/- 4% of total tank olosing stook (U)=Q*4%	Difference (V)= T - U	Permissibi e Evaporatio n/Handling Loss (W)=% as applicable *8	Final Variation within Permissibi e limits or not ?
DIESEL	20000	14779.00	120000.00	110459.00	8832.00	125947.00	115753.57	-10193.43	353.28	9840.15	289.38	NO
HI-SPEED	10000	4096.00	0.00	0.00	4096.00	0.00	0.00	0.00	163.84	-163.84	0.00	YES
PETROL	20000	14790.00	75000.00	69658.00	13034.00	76756.00	71477.55	-5278.45	521.36	4757.09	536.08	NO
SPEED	20000	9759.00	0.00	0.00	6785.00	2974.00	2964.20	-9.80	271,40	-261.60	22.23	YES
SPEED 97	10000	2833.00	5000.00	4922.00	6801.00	1032.00	1034.30	2.30	272.04	-269.74	2.59	YES

VARIATION LIMIT

RO's celling < 800 KL per year 0.76% of total nozzle cale for Petrol and Speed.

0.25% of total nozzle sale for Diesel and HSD.

--- End Of Report ---

Dealer Seal

BPCL Officer

Dealer Sign_____ Date____

Signature_____ Date____

RO INSPECTION REPORT: Automation system should keep a log of ROIR confirmed by SO and to generate Territory & HQ wise summary (cumulative and quarter wise) of ROIR confirmed by SO. System to allow a window for SO to enter the comments while confirming the ROIR.

DIESEL								
Date	TANK	ATG Opening Stock (A)	Bulk Receipt (Manual) (B)	Total (C=A+B)	Nozzle Product sale(Minus Testing & 2TOil) D	Calculated Closing Stock (E=A+B-D)	ATG closing Stock (F)	VARIATION (F-E)
1-Jun-09	1	10000	3000	13000	9700	3300	3250	50
	3	20000	3000	23000	8000	15000	14920	80
		30000	6000	36000	17700	18300	18170	130
2-Jun-09	1	3250	9000	12250	1700	10550	10590	-40
	3	14920	0	14920	1200	13720	13780	-60
		18170	9000	27170	2900	24270	24370	-100
2-Jun-09	1	10590	3000	13590	12700	890	885	5
	3	13780	3000	16780	12700	4080	4075	5
		24370	6000	30370	25400	4970	4960	10

PRODUCT WISE VARIATION: ROWISE REPORT FORMAT: The above represents a case of multiple tanks for the same product

RO Name	Poduct	Cumulative Tank Capacity	ATG Opening Stock (A)	Bulk Receipt (Manual) (B)	Total (C=A+B)	Nozzle Product sale(Minus Testing & 2TOil) D	Calculated Closing Stock (E=C- D)	ATG closing Stock (F)	VARIATI ON (F-E)
RO1	MS	20000	10000	3000	13000	9700	3300	3250	50
	HSD	45000	20000	3000	23000	8000	15000	14920	80

Note: Class A (MS, SPEED & SPEED 97) products would be clubbed under MS and Class B (HSD & Hi Speed) would be clubbed under HSD.

PRODUCT WISE VARIATION: CONSOLIDATED REPORT FORMAT

PRODUCT	DIESEL									
MONTH	May-09									
GLOBAL Nozzle No>	:	1		3	4			5		
DAYS OF MONTH	Opening Reading	Sale	Opening Reading	Sale	Opening Reading	Sale	Opening Reading	Sale	Total	Pump Testing
1	2517375.1	8402.2	1033374.7	6969.3	494077.3	1220.9	246149.6	1089.2	17681.6	10
2	2525777.3	9466.5	1040344	5305.1	495298.2	1677.3	247238.8	1338	17786.9	5
3	2535243.8	3426.2	1045649.1	1246.8	496975.5	1099.9	248576.8	948.8	6721.7	10
4	2538670	3390.8	1046895.9	1813.6	498075.4	874.3	249525.6	703.1	6781.8	10
5	2542060.8	11076.7	1048709.5	6916.3	498949.7	2063.5	250228.7	998	21054.5	5
6	2553137.5	4727.4	1055625.8	3564.1	501013.2	1737.5	251226.7	1159.4	11188.4	10
7	2557864.9	5327.3	1059189.9	3143.8	502750.7	693.4	252386.1	449.5	9614	5
8	2563192.2	10807.5	1062333.7	5167	503444.1	1254.6	252835.6	729.8	17958.9	0
9	2573999.7	5571.1	1067500.7	3834.4	504698.7	558.6	253565.4	312.8	10276.9	5
10	2579570.8	0	1071335.1	0	505257.3	0	253878.2	0	0	5

MONTHLY TOTALIZER REPORT: User to get daily Productwise, Nozzle Wise sales for a particular month.

REPORT PERIOD: 10-May-09 to 10-Jun-09 PARTY DETAILS ACCOUNT ID: 141 PARTY NAME : RJ ENTERPRISE LOCATION: GURGAON CONTACT PERSON: SUKHVINDER SINGH CONTACT: (M) 9958991234 (T) 0124-4567899 (F)0124-4569999 e-mail : rj_ent@ yahoo.com

S.No.	DATE&TIME	VEHICLE ID	FUELLING VOL (Ltrs.)	FUELLING AMT. (Rs.)	PRODUCT	CREDIT SLIP No. (If Applicable)	PAD RECEIPT NO.	МОР	DSM	MPD NO/SIDE
1	1-Jun-09 10:30AM	HR3LC1934	20	700	DIESEL	2432	1234	CASH	RAVI	1/2
2	1-JUN-09 11:40AM	RJ35J1934	25	925	HI-SPEED	2433	1234	CASH	RAVI	1/2
3	2-JUN-09 11:40AM	HR3CK1934	15	525	DIESEL	2456	1234	PETRO/ FLEET CARD	GANESH	1/1
4	3-JUN-09 11:40AM	DL16AJ5934	30	1110	DIESEL	2457	1234	PETRO/ FLEET CARD	SRI RAM	1/1
5	3-JUN-09 11:40AM	UP16M8793	10	350	PETROL	2458	1234	CREDIT/ DEBIT CARD	SATISH	2/1

CREDIT/ADVANCE PARTY DETAILS : System also to keep a track of Credit Slips. System should be able generate Random slip no.s or the credit slip no.s range can be entered manually for a particular party

				PRODUCT				
		SPEED	PETROL	HI-SPEED	DIESEL	TOTAL		
NOZZLE PRODUCT SALES	(Ltrs.)	8000	20000	5000	40000	73000		
CUSTOMERS (Nos.)		500	2000	250	500	3250		
%AGE CONTRIBUTION	%NOZZLE PRODUCT SALE	10.96	27.40	6.85	54.79			
	%CUSTOMERS	15.38	61.54	7.69	15.38			
TOTAL FUEL SOLD AMOUN	NT (Rs.)	23500.00	90000.00	9250.00	17500.00	140250.00	MOP %A	GE CONTRIBUTION
	CASH Amt.	11750.00	54000.00	4625.00	5250.00	75625.00	53.92	CASH Amt.
	CASH Count	200	1500	100	300	2100	64.62	CASH Count
	CREDIT/ DEBIT CARD Amt.	9400.00	27000.00	3700.00	1750.00	41850.00	29.84	CREDIT/ DEBIT CARD Amt.
METHOD OF PAYMENT	CERDIT/DEBIT CARD Count	200	300	50	0	550	16.92	CERDIT/DEBIT CARD Count
	PETRO/ FLEET CARD Amt.	2350.00	9000.00	925.00	10500.00	22775.00	16.24	PETRO/ FLEET CARD Amt.
	LOYALTY CARD Count	100	200	100	200	600	18.46	LOYALTY CARD Count
	Count(Nos.)	10	5	4	2	21		
SAMPLING	Vol. (Ltrs)	30	10	8	4	52		
	Amt. (Rs.)	1410.00	450.00	296.00	140.00	2296.00		
	Count (Nos.)	0	0	10	20	30		
OWN USE	Vol. (Ltrs)	0	0	200	300	500		
	Amt. (Rs.)	0.00	0.00	7400.00	10500.00	17900.00		

PRODUCT WISE, MOP WISE DETAILED REPORT

RO NAME	CC	Territory code	Territory Name	Ca	sh	Credit/I Card	Debit Is	Loya	alty	Local A	ccount	Own Use	Testing trxns	Sampling trxns
				No. of trxns	Amt	No. of trxns	Amt	No. of trxns	Amt	No. of trxns	Amt	trxns		

CONSOLIDATED MOP WISE REPORT:Consolidation of MOP to be done at bussiness area/Region, *Territory & Dealer. When selected dealer wise report, the report format would be same like that of RO.*

Territory CodeTerritory NameNo of Dealers	No Of dealers using SMS facility	No Of customers Registered	No of SMS
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CUSTOMER SMS REPORT: Consolidation of SMS to be done at bussiness area/Region, Territory & Dealer.When selected dealer wise report, the report format would be same like that of RO.

			Last ROIR			Manual
	First ROIR		recon		No of days	sale in
Ro	recon ID/No	Date &	no/ID	Date &	data not	nozzles
Name	available	time	available	Time	available	Yes/No

ROIR RECON AVAILABILITY REPORT: When territory wise report is generated for a period, it should give details of all the ROs under that territory. For indicating manual sale flag, 500 lit/nozzle (for the selected period) to be considered as the permissible limit (no Manual sale). This limit should be configurable by admin. An alert in form of SMS or report on daily basis is also desired for this report functionality.



PRICE CHANGE Vs TANK STOCK ANALYSIS- RO WISE REPORT: This analysis is required to be generated for a period of min 10 days. The graphical representation is required in the same window. All values in KL.

Territroy Code :XXXX														
Territory Name : XXXX														
No of ROS	21													
Product	DIESEL													
MERCHANT_ID	ME_NAME	ME_SAPCC	TANKAGE	1-Jun-13	2-Jun-13	3-Jun-13	4-Jun-13	5-Jun-13	6-Jun-13	7-Jun-13	8-Jun-13	9-Jun-13	10-Jun-13	AVG_CLOSING_STOCK
ME000001945	HIGHWAY AUTO SERVICES	101925	50.00	35.63	29.14	17.49	11.00	25.00	10.89	13.89	6.21	18.76	22.34	19.04
ME000001948	KRISHNA PETROLEUM (KALAMBOLI)	101930	150.00	0.00	0.00	0.00	0.00	0.01	63.21	32.55	60.50	49.23	44.13	24.96
ME0000001953	VAIBHAV AUTOMOBILES	101949	55.00	31.40	23.72	26.72	32.18	21.60	31.49	33.20	42.01	24.94	37.92	30.52
ME0000001954	VICTORY AUTOMOBILES	101950	90.00	35.47	17.15	7.53	10.15	35.50	25.50	16.00	24.00	22.00	16.00	20.93
ME0000002121	ABHISHEK SERVICE CENTER	114141	30.00	21.16	15.60	14.10	9.00	25.00	20.00	16.00	12.00	11.00	N.A	15.98
ME0000002692	CHARKOP PETROLEUM	122131	35.00	N.A	0.00									
ME000002833	VARADAAN FUEL STATION	128879	20.00	5.67	7.77	3.49	5.32	8.05	10.50	6.00	8.00	5.33	8.00	7.57
ME0000002939	ADARSH SERVICE STATION	101873	15.00	8.77	12.36	13.23	14.56	15.12	12.00	12.50	9.92	6.77	10.90	11.61
ME0000002940	A G JAJAL	101920	55.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ME0000002945	AURO PETROLEUM CENTRE	100852	20.00	16.12	17.02	13.35	13.23	13.32	16.69	10.36	12.17	12.61	15.85	14.07
ME0000002948	BAHRI AUTO SERVICE	100854	20.00	13.35	4.47	12.77	13.77	3.91	16.55	6.26	19.06	12.69	4.65	10.75
ME0000002949	BAJRANG AUTO SERVICE	100855	30.00	21.25	15.11	14.52	17.30	18.36	16.42	20.49	32.22	26.34	32.44	21.45
ME0000002957	FAMOUS AUTO SERVICE STATION	100869	24.00	14.49	11.02	12.88	14.86	17.51	19.88	12.19	17.24	15.68	7.10	14.29
ME0000002958	DAULAT AUTOMOBILES	100862	30.00	6.31	15.39	9.36	N.A	8.69	11.58	9.83	17.55	14.77	12.87	10.64
ME0000002969	GOREGAON PETROL SUPPLY CO	100936	65.00	N.A	0.00									
ME0000002970	GURUNANAK AUTOMOBILES	100937	80.00	N.A	0.00									
ME0000002971	HIGHWAY AUTOMOBILES, GHATKOPAR	100940	38.00	22.75	22.75	22.75	22.75	22.75	22.75	22.75	22.75	18.41	24.09	22.45
ME0000002975	J.B.PATEL & CO (QUEENS RD)	100946	20.00	7.05	5.26	2.56	9.25	6.19	2.41	9.58	7.08	5.63	6.50	6.15
ME000002978	JUHU AUTO SERVICE	100948	15.00	N.A	0.00									
ME000002979	KAKA AUTOMOBILES	100950	20.00	5.76	2.34	8.76	7.89	2.69	4.18	5.03	9.41	5.83	6.27	5.82
ME000002982	M/S OM SIDDHESHWARI FUEL WORLD	100949	20.00	N.A	0.00									
			882.00	245.18	199.10	179.51	181.26	223.70	284.05	226.63	300.12	249.99	249.06	

PRICE CHANGE Vs TANK STOCK ANALYSIS- TERRITORY WISE REPORT: This analysis is

required to be generated for a period of min 10 days. Total tankage to be displayed with each RO. Average closing stock to be derived for no of days for which the report is generated .In case data not available for a particular day, then NA to be displayed and the same should not be considered during average calculation

					R	O TANKAG		STOCK AN	ALYSIS(M	ax 10 Days)			
							(01/06/2	013 To 10/0	6/2013)					
							۱	alues in KL						
REGION	1400													
PRODUCT	DIESEL													
Automation	ALL													
Territory C	Territory Name	No of RO's	Total Tankage	1-Jun-13	2-Jun-13	3-Jun-13	4-Jun-13	5-Jun-13	6-Jun-13	7-Jun-13	8-Jun-13	9-Jun-13	10-Jun-13	Avg Cl. Stock
1401	Manmad Retail T'ry	42	1000	245.88	360.02	400.9	580	400.01	660.1	223.5	365.1	390	450.67	407.61
1403	Mumbai Retail T'ry	67	3000	866.1	1200.1	900.65	989.11	1400.67	1300	1900.86	1456.78	1809.66	1300.88	1312.48
1404	Thane Retail T'ry	80	4000	2200.67	2108.1	1900.19	1800.66	1400.18	1600.93	1900.88	2000.66	2101.88	1866	1888.01
1409	Surat Retail T'ry	50	1800	968.22	886.22	889.09	689.23	1009	660.1	778.15	813.99	989.6	954.1	863.77
1410	Raipur Retail T'ry	53	1800	796.1	899.16	900.23	876.54	900	986.2	889.1	799.1	813.1	754.67	861.42
1411	Bhopal Retail T'ry	55	2200	1300.1	1001.1	989.67	1100.76	1287.98	1198.16	989.75	1238.9	987.1	1100.1	1119.36
1414	Indore Retail T'ry	45	1700	899.1	966.25	989.12	654.65	872.1	899.1	786.23	801.45	900.29	799.76	856.8
1417	Jabalpur Retail T'ry	30	1500	965.23	799.9	876.17	1100.87	953.21	1000.1	889.25	1009.1	977.24	886.52	945.75
1419	Ahmednagar Retail T'ry	27	1300	865.1	889.26	901.23	799.87	900.02	879.23	900.04	876.55	687.23	698.46	839.69
1422	Miraj Retail T'ry	22	1200	489.1	560.14	598.1	476.23	566.09	487.1	498.23	655.47	560.13	478.11	536.87
1423	Nagpur Retail T'ry	52	2200	1300.55	1122.34	1001.67	998.89	1201.1	1198.23	976.1	1023.23	1189.76	1123.23	1113.51
1425	Ahmedabad Retail T'ry	56	2200	1100.1	1200.98	989.23	1098.37	1166.78	989.23	976.45	1004.23	878.76	985.54	1038.96
1426	Pune Retail T'ry	55	2000	989.1	1001.61	965.11	999.23	1200.1	1198.23	1056.89	954.23	1100.1	1066.7	1053.13
		634	26300	12985.35	12995.18	12301.36	12164.41	13257.24	13056.71	12765.43	12998.79	13384.85	12464.74	12837.36

PRICE CHANGE Vs TANK STOCK ANALYSIS- **REGION WISE REPORT**: This analysis is required to be generated for a period of min 10 days. Consolidated tankage to be displayed for each territory.

RO Name : I	MOHAN NAGAR SERV	ICE STATION			
RO SAPCC :	118828				
ME ID : MEO	000003215				
Territory : N	Aeerut				
City : GHAZI	ABAD				
Automation	Type : BRASS-U				
Product :DIE	SEL				
TANKAGE: 5	OKL				
Date	Closing Stock	Nozzle Sale	SAP INV QTY	Receipt Entry at RO	ATG BR
1-Jun-13	21.00	15.00	0.00	0.00	0.00
2-Jun-13	6.00	5.00	12.00	12.00	11.89
3-Jun-13	13.00	10.00	12.00	12.00	11.60
4-Jun-13	15.00	7.00	0.00	0.00	0.00
5-Jun-13	8.00	12.00	24.00	24.00	23.59
6-Jun-13	20.00	10.00	0.00	0.00	0.00
7-Jun-13	10.00	9.00	12.00	12.00	11.96
8-Jun-13	13.00	5.00	0.00	0.00	0.00
9-Jun-13	8.00	12.00	24.00	24.00	23.68
10-Jun-13	20.00	10.00	0.00	0.00	0.00
11-Jun-13	10.00	8.00	12.00	12.00	11.95
12-Jun-13	14.00	11.00	12.00	12.00	11.84
13-Jun-13	15.00	8.00	0.00	0.00	0.00
14-Jun-13	7.00	12.00	24.00	24.00	23.92
15-Jun-13	19.00	9.00	0.00	0.00	0.00

CLOSING STOCK Vs NOZZLE SALE COMPARISON: This analysis is required to be generated for a desired period. This consolidated report should also be generated for Territory and Region.

ANNEX-E: AUTOMATION REPORT TEMPLATES

Please Note: All these reports mentioned below shall serve as a template to guide vendor in solution for Reports. However the final reports are to be approved by BPCL approval and subject to customization.

The following Report Templates do not cover all the Reports mentioned in the document. Balance formats to be devised by successful vendor after approval from BPCL

RO LEVEL REPORTS

.....

FOLLOWING MINIMUM INPUTS MUST BE THERE FOR GENERATING ANY REPORT

- **PERIOD OPTIONS**-<CALENDAR FORMAT>
- **TIME OPTIONS** WHERE-EVER APPLICABLE

ALL THE OUTPUT REPORTS MUST HAVE FOLLOWING MINIMUM HEADER DETAILS

REPORT DESCRIPTION:
RETAIL OUTET NAME:
RO SAP CC :
ERRITORY :
ROM TO : <date &="" time=""> (*as applicable)</date>
REPORT GENERATED ON : < Date&Time>

PRINT OPTION

SAVE OPTION

		-			
PRODUCT	DATE	DAY	RATE/	SALE	AMOUNT
				(Ltr.)	(Rs.)
SPEED	5-Jun-09	FRI	47	1000	47000
	6-Jun-09	SAT	47	500	23500
	7-Jun-09	SUN	47	300	14100
	8-Jun-09	MON	47	2000	94000
DIESEL	5-Jun-09	FRI	35	10000	350000
	6-Jun-09	SAT	35	5000	175000
	7-Jun-09	SUN	35	3000	105000
	8-Jun-09	MON	35	20000	700000
HI- SPEED	5-Jun-09	FRI	39	700	27300
	6-Jun-09	SAT	39	350	13650
	7-Jun-09	SUN	39	210	8190
	8-Jun-09	MON	39	1400	54600
PETROL	5-Jun-09	FRI	45	1500	67500
	6-Jun-09	SAT	45	750	33750
	7-Jun-09	SUN	45	450	20250
	8-Jun-09	MON	45	3000	135000

DAILY PRODUCT WISE SALES BASED REPORT

S.No.	Receipt No.	Product	Amount (Rs.)	Volume (ltr)	Rate/Ltr	Method of Payment	Date & Time	DSM Name	MPD No/MPD Side	Global Nozzle No	Vehicle No	Vehicle Segment
1	2345	Petrol	2000	44.44	45	Cash	1-Jun-09 10:00PM	RAM	2⁄1	5	DL4CU1602	CAR
2	2346	Diesel	1200	34.29	35	Oredit/Debit Card	1-Jun-09 10:20PM	SHYAM	2/2	6	UP16M8791	HCV
3	2347	Speed	500	10.64	47	Petro/Fleet Card	1-Jun-09 10:30PM	AMT	1/2	1	DL31U1601	TWO-WHEELER
4	2348	H-Speed	1000	25.64	39	Cash	1-Jun-09 10:40PM	AMT	1/2	2	RJ3CJ2212	LCV
5	2349	Petrol	100	222	45	Cash	1-Jun-09 10:50PM	RAM	1/1	3	RJ3CX2215	TWO-WHEELER

Note: Advance filtering based on vehicle segment, MOP, Product, MPD ID, Vehicle No, Date & Time (option to choose range), Amount (option to choose the range) & Volume (option to choose the range)

AUDIT TRAIL FOR INDIVIDUAL TRANSACTIONS:-- User to have Search Options in various Fields

S.No.	Noz. No.	MPD ID.	MPD Make	Bay No.	Product	Shift Opening	Opening	Shift Closing	Closing	Totalizer
						Date Time	Totalizer	Date Time	Totalizer	Sale(Ltrs.)
1.	1	1	GILBARCO CHINA	1	DIESEL	10/07/2012 14:25:13	2168993.50	10/07/2012 15:56:33	2169089.10	95.60
2.	2	1	GILBARCO CHINA	1	HI SPEED	10/07/2012 14:25:13	1007873.30	10/07/2012 15:56:33	1007873.30	0.00
3.	3	1	GILBARCO CHINA	1	PETROL	10/07/2012 14:25:13	53833.30	10/07/2012 15:56:33	54104.00	270.70

SHIFT RECONCILIATION REPORT

PRODUCT	OLDPRICE	NEWPRICE	LOGINBY	DATE AND TIME OF PRICE CHANGE INPUT	PRICE CHANGE EFFECTIVE FROM
SP⊞D	50	47	DEALER	01-Jun-09 10:00 PM	02-Jun-0900:00AM
PETROL	47	45	DEALER	01-Jun-09 10:01 PM	02-Jun-0900:00AM
DIESEL	37	35	ADMN	01-Jun-09 10:05 PM	02-Jun-0900:00AM
HG-59000	40	37	ADMN	01-Jun-09 10:00 PM	02-Jun-0900:00AM

AUDIT TRAIL FOR PRICE CHANGES AT RO LEVEL:

PRODUCT	OLD PRICE	NOZZLE PRODUCT SOLD @ OLD PRICE	NEW PRICE	NOZZLE PRODUCT SOLD @ NEW PRICE
SPEED	50	3000	47	6600
PETROL	47	15000	45	33000
DIESEL	37	20000	35	44000
HI-SPEED	40	2000	37	4400

FUEL PRICE VS FUEL SOLD BREAKUP REPORT

Vehicle No	Product	Count of Transaction	Volume (Ltrs)	Amount (Rs)
DL4CU1603	Petrol	5	70	5110

VEHICLE No. wise REPORT The hyperlink under No. of times fuelled should give all the individual Transactions

S.No	Tank ID	Product	Tank Capacity (Ltrs)	Allowed Minimum Vol. (Ltrs)	Current Tank Vol. (ATG) (Ltrs)	ATG Reading Date/Time	Density (Manual) (KG/M3)
1	1	SPEED	20000	2000	15000	01-Jun-09 01:00PM	727.2
2	2	PETROL	45000	4500	24500	01-Jun-09 01:00PM	725.2
3	3	HI-SPEED	20000	2000	10000	01-Jun-09 01:00PM	820.7
4	4	DIESEL	45000	4500	30000	01-Jun-09 01:00PM	815.9
5	1	SPEED	20000	2000	14000	01-Jun-09 02:00PM	727.2
6	2	PETROL	45000	4500	24000	01-Jun-09 02:00PM	725.2
7	3	HI-SPEED	20000	2000	9500	01-Jun-09 02:00PM	820.7
8	4	DIESEL	45000	4500	30000	01-Jun-09 02:00PM	815.9

Hourly Tank Stock Report: The Allowed minimum volume should be configurable

Customers Fuelled (No.)						Method Of Payment (Rs.)						
DSM Name	DSM ID	MS	HSD	Speed	HI-Speed	Total Customers Fuelled	Cash (A)	Petro/ Fleet Card (B)	Credit/ Debit Card (C)	Total Amount (A+B+C)	Self	Test
RAM	1	3460	153	6664	21	10298	105089.00	40090.20	1000.00	146179.20	2215.00	100.00
SHYAM	2	7	2399	23	335	2764	245101.70	54671.00	1500.00	301272.70	100.70	0.00
RAVI	3	12241	477	23492	164	36374	331544.40	0.00	48500.00	380044.40	979.50	218.40
MANOJ	4	3854	30	6675	43	10602	102794.20	15720.00	55000.00	173514.20	244.00	0.00
		19562	3059	36854	563	60038	784529.30	110481.20	106000.00	1001010.50	3539.20	318.40
CUSTOMER %AGE CONTRIBUTION					MOP PERCENTAGE CONTRIBUTION				-			
		32.58	5.10	61.38	0.94		78.37	11.04	10.59			

DSM WISE MOP report. *These Reports to also Indicate the Shift No.*

Date	Cash Sales Amount	No. of Cash Transactio ns	Credit/ Debit Card Amount	No. of Credit/ Debit Card Transactions	Loyalty Amoun t	No. of Loyalty Transac tions	Local Credit Account	Own use	testin g

MOP WISE DETAILED REPORT: *This Report to be generated for selected period.*

S.No	DryStock Item Code	Item Details	Qty Sold	Rate	Amount
1	1234	MAK 2T Lube	3	200	600
2	3456	MAK 4T Lube	3	300	900

Dry stock Report

TYPE C Site Contro ATG Failure MPD Failure etc.	DF EXCEPTION	
Site Controller Failure		
RO Equipment & ID	Alarm Details	Alarm Date Time
Site Controller ID No. 1234	Power Off	01.Jun.0910:35pm
Site Controller ID No. 7845	Power Off	03. Jun.09 01:35pm
MPD Failure		
RO Equipment & ID	Alarm Details	Alarm Date Time
Gilbarco 3x6x2 MPD ID 1	MPD Offline	01.Jun.0911:35pm
Gilbarco 2x4x4 MPD ID 2	Communication	03. Jun.09 02:35pm
	Failure	

EXCEPTION REPORTS

Vehicle	Total	Total Fuel	Total Fuel Sold
Segment	Customers	Sold (Ltrs)	Amount (Rs.)
CARS	100	1500	67500
HCV	20	2000	70000
LCV	50	1500	52500
Two Wheelers	100	500	23500
Agricultural	10	500	17500
	280	6000	231000

VEHICLE SEGMENT WISE REPORTS

MPD	MPD	Nozzle No	MAIN	2	2T Oil So	ld Vol(Ltrs)	TOTAL 2T OIL Sold
	No/Side		PRODUCT	2%	3%	4%	5%	Vol. (Ltrs)
Dresser Wayne 2x4x4 2T	3/1	10	PETROL	10	40	5	10	65
Dresser Wayne 2x4x4 2T	3/2	11	PETROL	5	35	0	5	45
	-						-	110

2T-Oil Sale Report

DSM %age Contribution

												3		
S.No	DSM Name	DSM ID	Total Custome rs Attended	Total Fuel Sold (Ltrs)	Total Fuel Sold Amount (Rs)	Petrol Vol Sold (Ltrs.)	Petrol Amount (Rs.)	Speed Vol Sold (Ltrs)	Speed Amount (Rs)	Hi-Speed Vol Sold (Ltrs.)	Hi-Speed Amount (Rs)	% age Customers Attended	%age Fuel Sold	%Age Fuel Sold Amount
1	Ram	1	1000	10200	456960	7140	321300	2040	95880	1020	39780	27	19	20
2	Sham	2	2000	30000	1344000	21000	945000	6000	282000	3000	117000	54	57	57
3	Mohan	3	300	6000	249600	1800	81000	600	28200	3600	140400	8	11	11
4	Ravi	4	400	6800	288320	2040	91800	1360	63920	3400	132600	11	13	12
			3700	53000	2338880	31980	1439100	10000	470000	11020	429780			

DSM PERFORMANCE REPORT These Reports to also Indicate the Shift No.

S.No	MDP No /Side	MPD	Global Nozzle No	Product Name	Total Customers	Avg. Customers Per Day	Total Vol Sold (Ltrs)	Avg. Vol Sold (Ltrs)	Total Sold Amount (Rs.)	Avg. Sold Amt (Rs.)
1	1/1	Gilbarco 2x4x2	1	DIESEL	200	50	3000	750	105000	26250
2	1/1	Gilbarco 2x4x2	2	HI-SPEED	400	100	6000	1500	234000	58500
3	1/2	Gilbarco 2x4x2	3	DIESEL	100	25	1500	375	52500	13125
4	1/2	Gilbarco 2x4x2	4	HI-SPEED	150	38	2250	563	87750	21938
5	2/1	Dresser Wayne 3x6x2	5	DIESEL	100	25	2000	500	70000	17500
6	2/1	Dresser Wayne 3x6x2	6	HI-SPEED	400	100	6000	1500	234000	58500
7	2/1	Dresser Wayne 3x6x2	7	SPEED	600	150	9000	2250	423000	105750
8	2/2	Dresser Wayne 3x6x2	8	DIESEL	150	38	2250	563	78750	19688
9	2/2	Dresser Wayne 3x6x2	9	HI-SPEED	100	25	1500	375	58500	14625
10	2/2	Dresser Wayne 3x6x2	10	SPEED	120	30	1800	450	84600	21150
					2320	58	35300	8825	1428100	35703

NOZZLE UTILIZATION REPORT: Advance filtering to be available based on MPD, Product & Nozzle.It should additionally provide % of the total sale under the product.

S.No.	Product	Receipt Date and Time	Invoice No.	Tank ID	Invoice Quantity (Ltr)	Invoice Density (Kg/m3)	Observed Density (Kg/m3)	ATG Receipt Reading (Ltrs.)	Manual Entry of Receipt (Ltrs.)
1	DIESEL	01-June-09 @ 10:00 am	123456789 0	2	12000	820.22	820.12	11700	12000
1	SPEED	02-June-09- @ 11:00 am	144456789 0	2	12000	820.22	820.12	8000	9000
1	PETROL	03-June-09-@11:00 am	155456789 0	2	12000	820.22	820.12	11900	12000

Bulk Receipt Report



24 Hr. Wet-Stock Sale Statistics- Graphical

Hours	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Average
0-1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1-2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2-3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3-4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4-5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5-6	134.92	17.80	47.00	66.34	131.07	90.76	16.45	72.05
6-7	3,653.17	2,330.82	3,737.47	2,227.44	4,254.83	2,944.98	2,383.35	3,076.01
7-8	5,965.54	4,076.02	5,301.47	4,203.76	6,428.85	4,440.22	3,536.50	4,850.34
8-9	5,539.03	5,347.23	5,365.36	4,425.25	6,027.25	5,689.99	3,613.49	5,143.94
9-10	7,291.31	7,391.96	8,371.96	6,067.35	8,970.02	7,399.72	6,006.75	7,357.01
10-11	9,141.73	7,948.54	8,041.65	7,068.33	11,464.52	9,155.55	7,377.97	8,599.76
11-12	8,561.87	8,326.04	8,539.71	8,307.18	10,696.14	11,024.27	8,418.20	9,124.77
12-13	7,932.51	6,800.38	7,645.77	8,184.50	9,543.34	10,920.69	8,196.53	8,460.53
13-14	5,960.29	6,201.58	7,424.47	6,259.03	10,170.70	8,664.82	8,275.39	7,565.18
14-15	6,766.47	5,612.52	6,751.45	6,119.84	8,184.39	9,918.13	7,217.03	7,224.26
15-16	6,957.83	5,984.95	6,559.28	5,695.52	8,505.17	9,642.38	7,051.25	7,199.48
16-17	7,423.48	5,594.20	6,517.86	6,474.41	8,504.79	7,980.81	7,062.24	7,079.68
17-18	7,333.35	6,220.51	7,068.52	7,566.95	9,637.41	10,731.70	7,281.20	7,977.09
18-19	8,847.78	6,452.81	8,732.03	7,629.94	10,289.29	9,432.37	7,338.14	8,388.91
19-20	8,376.61	7,809.44	6,981.94	6,863.87	10,545.87	7,918.49	7,473.42	7,995.66
20-21	8,441.14	6,925.60	7,934.75	7,005.95 -	10,277.14	8,351.10	7,243.57	8,025.61
21-22	7,183.92	5,546.75	7,312.39	5,771.48	8,858.18	6,971.77	7,164.15	6,972.66
22-23	3,931.80	3,692.12	4,167.96	4,882.68	6,796.28	5,859.95	5,538.57	4,981.34

24 Hr. Wet-Stock Sale Statistics- Numeric : User should be able to generate product wise (all,

individual or group wise) report for a day, week, month of desired period. The report should additionally have the vehicle count on day basis.

					ACTUAL	ACTUAL			
				PRESET	DELIVERED	DELIVERED			
NOZZLE_ID	BAY	TRX_DATE	TYPE	VALUE	AMOUNT	VOLUME	DIFF	VEHICLE_NO	DSM_NAM
		29/04/2013							
1	1/1	02:54:02	AMOUNT	1500.00	808.90	16.62	691.10	DL01BM2011	JAIBIR
		29/04/2013							
11	3/1	10:55:00	VOLUME	10.00	654.79	9.90	0.10	DL03GH2047	RAMNARE

Preset Vs actual delivered quantity report : User should be able to generate product wise (all,

individual or group wise)report for a day, week, month of desired period. Report to additionally include product and mobile no (if the customer is acquired) suitably.

Name Of the RO	Product	Tank No	Tank Capacity	Current Volume	Date & Time
ABC Filling					
station	Petrol	2	20000	1000	22.03.2013, 1600 hrs

RO Dry-out report : User should be able to generate report for a desired period. The report should also be generated on product wise where consolidated tankage and capacity and current volume is shown.





Retail Outlet Inspection Report(Recon) (01/02/2014 21:01:32 To 10/02/2014 21:00:29)

RO Name: BP-BKC RO SAPCC: 142814 ME ID: ME0000006386 Territory: Mumbal City: MUMBAI Avg. Annual Sale: Below 600KL Generated By: riteshcotis on 21/02/2014 06:43:38 from IP 10.80.12.120

Product Wise & Nozzle Wise Sales:

Product Name	MPD	MPD No /Side	Nozile	Opening Reading (A) (Uns)	Closing Reading (B) (Uns)	Tealing City (C) (Line)	Total 2T Sale (0) (Ltre)	Pump Sales (E=B-A-C) (Lins)	POS Sales (Without 2T) F(Lins)	(Pump-POS) Sales(E-P) (Lins)
DIESEL	GIL 4P10H12D	1/1	DHM1-51-N2	970719.10	996426.60	15.00	0.00	25692.70	25692.73	-0.05
DIESEL	64L 4P*0H*2D	1/2	DI-M1-52-N6	321791.50	331511.00	20.00	0.00	9699.50	9699.49	0.01
DIESEL	64L 4P10H12D	2/1	DHM9-61- N10	812943.80	843343.40	20.00	0.00	30379.60	30379.53	0.07
DIESEL	64L 4P10H12D	2/2	DHM2-53- N14	500104.80	509017.10	20.00	0.00	25662.30	25662.00	0.00
DIESEL	64L 4P10H12D	571	DHW3-61- N20	551262.20	\$52853.30	76.63	0.00	2494.27	2494.20	0.07
DIESEL	4P10H12D	5/2	DH#3-63- N24	202446.50	232546.20	30.00	0.00	69.70	69.74	-0.04
DIESEL	GIL 4P10H12D	4/1	DHM4-51- N25	1140424.20	1109102.40	10.30	0.00	20667.90	20667.85	0.04
DIESEL	GIL 4P*0H*2D	4/2	DHM4-53- NS2	290331.20	399228.60	10.00	0.00	667.90	667.53	0.07
HESPEED	GIL 4P10H12D	171	HS-MI-S1- N1	386767.70	386787.70	0.00	0.00	0.00	0.00	0.00
HESPEED	64L 4P10H12D	1/2	HS-M1-53- NS	221455.30	221455.30	0.00	0.00	0.00	0.00	0.00
HESPEED	GIL 4P10H12D	4/1	HS-M4-S1- N27	41543.30	41543.30	0.00	0.00	0.00	0.00	0.00
HESPEED	GIL 4P10H12D	4/2	HS-84-53- N34	10204.20	13284.20	0.00	0.00	0.00	0.00	0.00
PETROL	64L 4P10H12D	171	PE-M1-51- N3	273643.50	279399.50	32.29	0.00	6723.71	5723.74	-0.03
PETROL	GIL 4P10H12D	1/2	PE-M1-63- N7	452925.10	402294.40	20.00	0.00	9349.30	9349.29	0.04
PETROL	GIL 4P*0H*2D	2/1	PE-M3-61- N11	305191.50	311143_40	20.00	0.00	5601.90	5951.88	0.02
PETROL	4P10H12D	2/2	PE-M9-63- N15	510322-20	519635.60	19.95	0.00	9494.45	9494.44	0.01
PETROL	GIL 4P10H12D	3/1	PE-M3-51- N19	90104.80	90104.60	0.00	0.00	0.00	0.00	0.00
PETROL	GIL 4P10H12D	3/2	PE-M3-62- N23	317003.00	330536_40	20.00	0.00	13513.40	10513.40	0.00
PETROL	64L 4P10H12D	471	PE-M4-61- N26	949098.00	966110.20	25.01	0.00	16967.19	16967.17	0.02
PETROL	61L 4P10H12D	4/2	PE-M4-62- N30	008792.80	019290.40	20.00	0.00	10477.60	10477.58	0.02
SPEED	GIL 4P10H12D	1/1	SP-M1-S1- N4	222927.90	223118.30	20.00	0.00	170.40	170.44	-0.04
SPEED	64L 4P10H12D	1/2	6P-W1-52- N8	107357.50	167544.60	20.00	0.00	167.10	167.07	0.00
SPEED	61L 4P10H12D	2/1	SP-M2-S1- N12	15848.30	10192.90	20.00	0.00	326.60	328.57	0.03
SPEED	GIL 4P10H12D	2/2	6P-M3-63- N16	01686.00	32256.50	30.00	0.00	\$40.50	540.55	-0.05
SPEED	64L 4P10H12D	571	SP-M3-S1- N10	10107.70	19055.40	20.00	0.00	647.70	847.76	-0.05
SPEED	GIL 4P*0H*2D	3/2	SP-M3-62- N22	17400.00	18106.00	30.00	0.00	567,40	567.47	-0.07

SPEED	GIL 4P*8H*2D	4/1	3P-M4-81- N25	65478.80	65478.80	0.00	0.00	0.00	0.00	0.00
SPEED	GIL 4P*8H*2D	4/2	SP-M4-82- N29	31980.90	32335.40	30.00	0.00	324.50	324.50	0.00
SPEED 97	GIL 4P*8H*2D	2/1	897-M2-81- N9	5396.30	5416.30	20.00	0.00	0.00	0.00	0.00
SPEED 97	GIL 4P*8H*2D	2/2	897-M2-82- N13	43560.00	44492.70	20.00	0.00	912.70	903.18	9.52
SPEED 97	GIL 4P*8H*2D	3/1	897-M3-81- N17	3358.60	3500.20	20.00	0.00	121.60	121.58	0.02
SPEED 97	GIL 4P*8H*2D	3/2	897-M3-82- N21	686.80	686.80	0.00	0.00	0.00	0.00	0.00

Individual Tank Wise Stock & Sales vs Connected Nozzle Sales:

Product Name	Tank NoJCapaolty(Ltr 6)	Opening Stock (A) (Ltrs)	Bulk Receipt (Manual) (B) (Ltrs)	Bulk Receipt (ATG) (C) (Ltrs)	Closing Stock (D) (Ltrs)	Total Tank Sales (E=A+B- D) (Ltrs)	Total Pump Sales (F) (Ltrs)	Variation (G=F- E)
DIESEL	5 / 20000	14779.00	120000.00	110459.00	8832.00	125947.00	115753.57	-10193.43
HI-SPEED	1 / 10000	4096.00	0.00	0.00	4096.00	0.00	0.00	0.00
PETROL	4 / 20000	14790.00	75000.00	69658.00	13034.00	76756.00	71477.55	-5278.45
SPEED	3 / 20000	9759.00	0.00	0.00	6785.00	2974.00	2964.20	-9.80
SPEED 97	2 / 10000	2833.00	5000.00	4922.00	6801.00	1032.00	1034.30	2.30

Product Wise Stock & Sales Reconciliation of Retail Outlet:

Product Name	Total Tank Capaoity(L tre)	Opening Stook of All Tank Ex.ATG(N) (Ltre)	Total Bulk Receipt Ex.Manual (O) (Ltre)	Total Bulk Receipt Ex.ATG (P) (Ltrs)	Total Closing Stook of all Tank Ex.ATG(Q) (Ltre)	Totai Sales Based On Tank (R)=N+O-Q (Ltrs)	Total Sales Based On Nozzie throughpu t (8) (Ltrc)	Variation T=8-R	Permissibl e Variation on +/- 4% of total tank olosing stook (U)=Q*4%	Difference (V)= T - U	Permissibi e Evaporatio n/Handling Loss (W)=% as applicable *8	Final Variation within Permissibi e limits or not ?
DIESEL	20000	14779.00	120000.00	110459.00	8832.00	125947.00	115753.57	-10193.43	353.28	9840.15	289.38	NO
HI-SPEED	10000	4096.00	0.00	0.00	4096.00	0.00	0.00	0.00	163.84	-163.84	0.00	YES
PETROL	20000	14790.00	75000.00	69658.00	13034.00	76756.00	71477.55	-5278.45	521.36	4757.09	536.08	NO
SPEED	20000	9759.00	0.00	0.00	6785.00	2974.00	2964.20	-9.80	271,40	-261.60	22.23	YES
SPEED 97	10000	2833.00	5000.00	4922.00	6801.00	1032.00	1034.30	2.30	272.04	-269.74	2.59	YES

VARIATION LIMIT

RO's selling < 600 KL per year 0.76% of total nozzie sale for Petrol and Speed.

0.25% of total nozzle sale for Diesel and HSD.

--- End Of Report ---

Dealer Seal

BPCL Officer

Dealer Sign_____ Date_____ Date_____ Date_____ Date_____

RO INSPECTION REPORT

DIESEL								
Date	TANK	ATG Opening Stock (A)	Bulk Receipt (Manual) (B)	Total (C=A+B)	Nozzle Product sale(Minus Testing & 2TOil) D	Calculated Closing Stock (E=A+B-D)	ATG closing Stock (F)	VARIATION (F-E)
1-Jun-09	1	10000	3000	13000	9700	3300	3250	50
	3	20000	3000	23000	8000	15000	14920	80
		30000	6000	36000	17700	18300	18170	130
2-Jun-09	1	3250	9000	12250	1700	10550	10590	-40
	3	14920	0	14920	1200	13720	13780	-60
		18170	9000	27170	2900	24270	24370	-100
2-Jun-09	1	10590	3000	13590	12700	890	885	5
	3	13780	3000	16780	12700	4080	4075	5
		24370	6000	30370	25400	4970	4960	10

PRODUCT WISE VARIATION: ROWISE REPORT FORMAT: The above represents a case of multiple tanks for the same product

RO Name	Poduct	Cumulative Tank Capacity	ATG Opening Stock (A)	Bulk Receipt (Manual) (B)	Total (C=A+B)	Nozzle Product sale(Minus Testing & 2TOil) D	Calculated Closing Stock (E=C- D)	ATG closing Stock (F)	VARIATI ON (F-E)
RO1	MS	20000	10000	3000	13000	9700	3300	3250	50
	HSD	45000	20000	3000	23000	8000	15000	14920	80

Note: Class A (MS, SPEED & SPEED 97) products would be clubbed under MS and Class B (HSD & Hi Speed) would be clubbed under HSD.

PRODUCT WISE VARIATION: CONSOLIDATED REPORT FORMAT

PRODUCT	DIESEL									
MONTH	May-09									
GLOBAL Nozzle No>	:	1		3	4			5		
DAYS OF MONTH	Opening Reading	Sale	Opening Reading	Sale	Opening Reading	Sale	Opening Reading	Sale	Total	Pump Testing
1	2517375.1	8402.2	1033374.7	6969.3	494077.3	1220.9	246149.6	1089.2	17681.6	10
2	2525777.3	9466.5	1040344	5305.1	495298.2	1677.3	247238.8	1338	17786.9	5
3	2535243.8	3426.2	1045649.1	1246.8	496975.5	1099.9	248576.8	948.8	6721.7	10
4	2538670	3390.8	1046895.9	1813.6	498075.4	874.3	249525.6	703.1	6781.8	10
5	2542060.8	11076.7	1048709.5	6916.3	498949.7	2063.5	250228.7	998	21054.5	5
6	2553137.5	4727.4	1055625.8	3564.1	501013.2	1737.5	251226.7	1159.4	11188.4	10
7	2557864.9	5327.3	1059189.9	3143.8	502750.7	693.4	252386.1	449.5	9614	5
8	2563192.2	10807.5	1062333.7	5167	503444.1	1254.6	252835.6	729.8	17958.9	0
9	2573999.7	5571.1	1067500.7	3834.4	504698.7	558.6	253565.4	312.8	10276.9	5
10	2579570.8	0	1071335.1	0	505257.3	0	253878.2	0	0	5

MONTHLY TOTALIZER REPORT: User to get daily Productwise, Nozzle Wise sales for a particular month.

S.NO.	CUST. ACCOUNT ID	CUST. NAME	OPENING BALANCE (A)	AMOUNT RECEIVED (RS.) (B)	NEW BALANCE (A+B)	PAYMENT MODE	PARTICULARS (TEXT ENIRY)	PAYMENT RECEIVED DATE TIME
1	123	ST FLEET	0	20000	20000	CHEQUE	ICICI BANK 189039 from Anup Kumar	01-Jun-09 11:30AM
2	141	RJ ENTERPRISE	1000	50000	51000	CASH	500 Rupee NotesX100 Notes from Nem Singh	02-Jun-09 01:30PM
3	152	KUMAR AGENCY	2000	100000	102000	NEFT	Payment Advice 3388339 SBI Bank	02-Jun-09 02:40PM
4	162	ANUP TRAVELS	5000	30000	35000	DD	HDFC BANK 189039 from Auro Shukla	03-Jun-09 06:40PM

CREDIT/ADVANCE PARTY DEPOSIT DETAILS

REPORT PERIOD: 10-May-09 to 10-Jun-09 PARTY DETAILS ACCOUNT ID: 141 PARTY NAME : RJ ENTERPRISE LOCATION: GURGAON CONTACT PERSON: SUKHVINDER SINGH CONTACT: (M) 9958991234 (T) 0124-4567899 (F)0124-4569999 e-mail : rj_ent@ yahoo.com

S.No.	DATE&TIME	VEHICLE ID	FUELLING VOL (Ltrs.)	FUELLING AMT. (Rs.)	PRODUCT	CREDIT SLIP No. (If Applicable)	PAD RECEIPT NO.	МОР	DSM	MPD NO/SIDE
1	1-Jun-09 10:30AM	HR3LC1934	20	700	DIESEL	2432	1234	CASH	RAVI	1/2
2	1-JUN-09 11:40AM	RJ35J1934	25	925	HI-SPEED	2433	1234	CASH	RAVI	1/2
3	2-JUN-09 11:40AM	HR3CK1934	15	525	DIESEL	2456	1234	PETRO/ FLEET CARD	GANESH	1/1
4	3-JUN-09 11:40AM	DL16AJ5934	30	1110	DIESEL	2457	1234	PETRO/ FLEET CARD	SRI RAM	1/1
5	3-JUN-09 11:40AM	UP16M8793	10	350	PETROL	2458	1234	CREDIT/ DEBIT CARD	SATISH	2/1

DETAILED CREDIT/ADVANCE PARTY REPORT: System also to keep a track of Credit Slips. System should be able generate Random slip no.s or the credit slip no.s range can be entered manually for a particular party

Name of the Customer	Mobile No	Vehicle No	Fuelling date/Time	SMS generate date/time

CUSTOMER SMS SITE REPORT

S.No.	Product	Receipt Date and Time	Invoice No.	Tank ID	Invoice Quantity (Ltr)	Invoice Density (Kg/m3)	Observed Density (Kg/m3)	ATG Receipt Reading (Ltrs.)	Manual Entry of Receipt (Ltrs.)
1	DIESEL	01-June-09 @ 10:00 am	123456789 0	2	12000	820.22	820.12	11700	12000
1	SPEED	02-June-09- @ 11:00 am	144456789 0	2	12000	820.22	820.12	8000	9000
1	PETROL	03-June-09-@11:00 am	155456789 0	2	12000	820.22	820.12	11900	12000

<mark>Bulk Receipt Report</mark>