This Pega Cloud® Agreement (this "Cloud Agreement") is entered into as of October 21, 2015 by and between North Carolina Department of Environmental and Natural Resources ("Customer") and Pegasystems, Inc. ("Pegasystems") and is governed by and made a part of that certain Master Software License, Maintenance and Professional Services Agreement (the "MSLSA") between Customer and Pegasystems dated October 21, 2015. Where there is a conflict between the terms and conditions in this Cloud Agreement and the terms and conditions in the MSLSA, these terms and conditions will govern. Additional definitions from those in the MSLSA are stated on Exhibit 1 hereto.

1. Subscription Rights and Responsibilities.

- (a) Pegasystems will provide Customer a non-transferable, non-exclusive subscription to Pegasystems' Pega Cloud service, inclusive of the Software and Environments, for the number of Instances, Scope of Use and during the Term specified in the Schedule (the "Subscription"), to develop, test, and/or deploy into production Customer Applications on the Pega Cloud. As part of making the Subscription available to Customer, Pegasystems will (i) provide the applicable Subscription services described in Exhibit 2; (ii) provide the Subscription Support and Service Levels described in Exhibit 3 at the licensed capacity; and (iii) adhere to the security practices described in Exhibit 4; and (iv) use commercially reasonable efforts to make it available 24 hours a day, 7 days a week, other than as described in clause (d) below.
- (b) During the Term of the Subscription, Customer will:
 - (i) Be responsible for the accuracy, quality, integrity and legality of the Customer Applications, content and data and for the quality and Guardrail Compliant configuration of the Customer Applications and the performance of such Customer Applications. Customer may engage Pegasystems for performance-tuning services pursuant to a Work Order executed by the parties;
 - (ii) (RESERVED)
 - (iii) Use the Subscription only in accordance with the Subscription Documentation and applicable laws and government regulations;
 - (iv) Prevent unauthorized access to or use of the Subscription, and notify Pegasystems promptly of any such unauthorized access, use, or suspected breach;
 - (v) Comply with the Acceptable Use Policy;
 - (vi) Not use any actual customer data or any other personally-identifiable data in the non-Production Environment. Customer will inform Pegasystems if actual customer data in a Production Environment will include personal health information (PHI);
 - (vii) Not include any confidential or sensitive data in its Customer Application log files;
 - (viii) Appropriately protect confidential or proprietary information related to Customer's use of the Subscription;
 - (ix) Protect its own security credentials. Actions taken using Customer's security credentials will be deemed to be actions taken by Customer and will be the responsibility of Customer; and
 - (x) Without limiting Pegasystems' obligations under the Subscription Support and Service Levels described in Exhibit 3 and the security practices described on Exhibit 4, be responsible for security, and protection of its content, data and Customer Applications in the Production Environment.
- (c) During the Term of the Subscription, Customer grants to Pegasystems a worldwide, limited-term license to: (i) host, copy, execute, transmit and display Customer's data and any Customer Applications (including non-Pegasystems' applications), as necessary for Pegasystems to provide the Subscription; and (ii) to use any information concerning Customer's Subscription experience in an anonymized form to help upgrade and improve the Pega Cloud services. Subject to the limited licenses granted here, Pegasystems will not acquire any right, title or interest from Customer in or to Customer's data or any third-party applications.
- (d) Customer acknowledges that Customer's access to and use of the Subscription may be suspended due to a Service Suspension. Pegasystems will use reasonable efforts to provide Customer email notice of any Service Suspension and updates regarding resumption of the Subscription following any such Service Suspension. Pegasystems will have no liability for any damage, liabilities, or other losses that Customer may incur as a result of any suspension of access to the Subscription Reserved.
- (e) Upon written notice of termination or expiration of Customer's Subscription by Pegasystems and upon Customer's written request made no later than thirty (30) days after the termination or expiration of the Customer's Subscription, Pegasystems will make Customer's data in its possession available to Customer by means of a backup file of the database that is running in the Production Environment and that is encrypted to customary standards, unless otherwise agreed in writing. Upon Customer's

validation of data following receipt of such from Pegasystems, or the lapse of the time period for Customer to request its data, Pegasystems will have no obligation to maintain or provide Customer's data in its possession or control and may delete such Customer data, unless legally prohibited.

2. <u>Subscription Restrictions</u>.

- (a) Customer may only use the Subscription in accordance with the terms of this Cloud Agreement and the PegaCloud Schedule. Customer may use the Software in object code and/or RuleSet form, for the Scope of Use specified in the applicable Schedule.
- (b) Unless specifically authorized by law, Customer may not reverse engineer, decompile, disassemble or otherwise attempt to determine source code or protocols from the Software. Customer agrees not to sell, resell, rent, outsource, timeshare, lease or sublicense the Subscription or the Software to any third party or otherwise use it except as permitted under this Cloud Agreement or the applicable Schedule.
- (c) In each Schedule, Customer will commit to purchase licenses for production use of each Customer Application at the time that development of the Customer Application begins. Customer will not use shared User IDs, or aggregating technologies such as concentrators, multiplexers, gateways or edge servers, to avoid or reduce the counting of individuals that use the Software.
- (d) Pegasystems retains all right, title and interest to the Subscription, Software and Background Materials. The Software will contain Pegasystems' copyright notice, and Customer will reproduce such notice in any permitted copy made by Customer.
- 3. <u>Delivery and Acceptance</u>. Pegasystems will create and email to Customer a URL that will allow Customer to access and use the Subscription. The Subscription will be accepted upon delivery ("Acceptance"). This Acceptance is not dependent on any remaining services, conditions or contingencies, and there are no other written or verbal agreements with respect to Acceptance. Unless otherwise agreed in writing, the Customer shall not be entitled to take possession of the Software.

Agreed:

Pegasystems Inc.		Customer	
	DocuSigned by:		
Ву:	Shawn Hayt	Ву:	
Name:	Shawn Hoyt	Name:	
Title:	Vice President	Title:	
Date:	10/21/2015	Date:	

DEFINITIONS

For the purposes of this Cloud Agreement and any Schedule, the following definitions will apply in addition to the definitions in the MSLSA, unless otherwise expressly stated:

- "Acceptable Use Policy" means the then current policy published at www.pega.com/cloud-aup.
- **"Environment"** means a Customer-accessible system operated by Pegasystems. The following types of Environments are available:
 - "Development/Test Environment" means an Environment that is used to develop and test Customer Applications and/or to train Users.
 - "Pre-Production Environment" means an Environment that designed for testing and staging of the Customer Application prior to its launch in the Production Environment.
 - "Production Environment" means an Environment in which Customer uses the Customer Application to process live and/or real-time data in connection with Customer's ongoing business operations.
- "Guardrail Compliant" means a Customer Application with no severe warnings flagged by the Software and with a guardrail weighted score generated by the Software that is within the range deemed compliant as specified in the Subscription Documentation.
- "Hibernate" means to stop or place an Instance in a stopped state while taking steps to preserve the data and validity of the Instance.
- "Instance" means a virtual server, provisioned and managed by Pegasystems for the Customer with up to 4.5Ghz of CPU, 7.5GB of RAM and 50GB of storage.
- "Production Storage" is calculated based on the aggregate of work objects, history entries, attachments and any customer data or files stored by the Customer on its Production Environment, with the amount specified on the applicable Schedule.
- "Schedule" means, respectively, a signed order form referencing this Cloud Agreement under which Customer receives a Subscription from Pegasystems. Each Schedule will be non-cancelable and non-refundable, except to the extent expressly provided in this Cloud Agreement or such Schedule or under applicable law.
- "Subscription Documentation" means the product help files, operating guides and support articles associated with the Subscription service posted on the Pega Discovery Network (PDN).
- "Subscription Month" means each applicable calendar month, or partial calendar month, in which the Subscription is contracted to be provided during the Term set forth in the applicable Schedule.
- "Service Suspension" means the unavailability of the Service (a) during weekends or on weekdays between 11:00pm and 5:00am Customer's local time zone with at least 3 days' notice (provided via email or on Pegasystems' web site) for scheduled downtime to permit Pegasystems to conduct maintenance or make modifications to the Service, (b) at any time in the event of a denial of service attack, or other event that Pegasystems reasonably determines may create a risk to the applicable Service, (c) for any reason outside of Pegasystems' reasonable control, including power outages, system failures or other interruptions, or (d) at any time in the event that Pegasystems reasonably determines that suspension is necessary for legal or regulatory reasons.
- "Term" is as defined in the applicable Schedule.

SUBSCRIPTION SERVICES

Pegasystems will provide following Subscription services according to the Environment licensed.

Pega Cloud Subscription Services			
Service	Dev/Test Environment	Pre-Production Environment	Production Environment
Back-up	 Daily Incremental back Ups Weekly Full Backups 4 weeks retention 	 Daily Incremental back Ups Weekly Full Backups 4 weeks retention 	 Near-time data replication to backup database Daily Incremental back ups Weekly Full Backups 4 weeks retention
Data Refresh	Movement of data sets between systems. Includes uploading sample data files for population into target systems.	Movement of data sets between systems. Includes uploading sample data files for population into target systems.	Movement of data sets between systems. Includes uploading sample data files for population into target systems.
Database Management	Client has read/write access to databaseAssist in executing DDL's	Assist in executing DDL's to create custom tables and indices	Assist in executing DDL's to create custom tables and indices
	to create custom tables and indices	Provide database performance statistics	Provide database performance statistics
		Identify and implement performance tuning changes	 Identify and implement performance tuning changes
Configuration Management	Client owned	Moving Customer Application configuration between systems	Moving Customer Application configuration between systems
Environment Monitoring	Active monitoring of Environment for failures	Active monitoring of Environment for failures	Active monitoring of Environment for failures
Customer Application Health Monitoring	• None	Pega AES Monitoring	Pega AES Monitoring
Environment Management	Client authorized users will have: Read/Write access to database	All access and actions managed via Service Desk	All access and actions managed via Service Desk
	All other environment access and actions managed via Service Desk.		
VPN connectivity	Single VPN endpoint for tunnel between the Environment and Client endpoint.	Single VPN endpoint for tunnel between the Environment and Client endpoint.	Single VPN endpoint for tunnel between the Environment and Client endpoint.
Load Balancer	None	Yes	Yes

Anti-Virus	Yes	Yes	Yes
Access Controls	Yes	Yes	Yes
Disk Encryption	None	Yes	Yes
Firewall Management	Yes	Yes	Yes
Server Time zone	GMT	GMT	GMT
# of Standard Instances	1	4	Scaled to fit

SUBSCRIPTION SUPPORT AND SERVICE LEVELS

1. Subscription Support

Pegasystems will provide Customer Subscription support comprising problem resolution, updates, and Pega Discovery Network access for the Subscription (together, "Pega Cloud Support").

2. Pega Cloud Support

Pega Cloud Support Services			
Coverage	24x7		
Service Desk Support	Provide a single point of contact service desk for support of the Subscription that may be contacted by contacting the Service desk at:		
	Country	Phone Number (Toll Free)	
	US	+1 877-311-3244	
	Germany	800-187-3660	
	India	000-800-100-7124	
	Netherlands	800-023-2787	
	Spain	900-808562	
	Thailand	001-800-852-8376	
	United Kingdom	808-189-0002	
	Updated numbers can be found at: https://pdn.pega.com/pega-cloud/pega-cloud-support. Customer can also complete a webform at https://pdn.pega.com/pega-cloud-support-desk		

Pega Cloud Support

Pegasystems will repair errors or problems with the Subscription so that the Subscription operates in substantial accordance with the Subscription Documentation. Pega Cloud Support includes:

- <u>Telephone or Self-service Support</u>: Pegasystems will accept service requests via telephone or webform notice from up to five Customer representatives designated by Customer in writing ("Designated Contacts") and will work with the Designated Contacts to provide relief and/or a permanent solution to problems as well as to provide Pega Cloud Support as described in the table below.
- <u>Customer's Designated Contacts</u>: Customer will provide Pegasystems with designated people who may contract Pegasystems' support. Customer may change these contacts upon written notice to Pegasystems, and it is the responsibility of Customer to update the contacts (e.g., if one the designated contact is no longer employed by Customer or authorized by Customer to contact Pegasystems' support).

 <u>Problem Resolution</u>: Pegasystems will work to perform problem resolution as described in Table A and Table B below:

	Support Table A		
Severity Level	Severity Level Description		
1	Severity 1 is used when the Subscription is down or otherwise unusable resulting in massive disruption of use.		
	Pegasystems' goal for providing initial relief (such as an alternative method to restore system operations) for Severity 1 cases is within 4 hours. The timeframe for providing a permanent resolution for Severity 1 issues is dependent upon the specific situation, and is typically jointly determined by Customer and Pegasystems' support manager. Severity 1 cases are eligible for continuous effort by Pegasystems support personnel, provided that Customer's resources are made similarly available, until relief is provided.		
2	Severity 2 is used with a moderate business exposure that prevents users from performing work or significant portions of their work.		
	The time frame for providing a permanent resolution for Severity 2 issues is dependent on the specific situation, and is typically jointly determined by the Customer and Pegasystems' support manager.		
3	Severity 3 problems include those that involve the failure of a feature or function which results in the Subscription not working as documented, creates low business exposure and/or prevents or delays users from performing some tasks.		
	Severity 3 is Pegasystems' default severity, and is always used for new cases unless otherwise requested by Customer.		
4	Severity 4 problems create minimal business exposure with mild impact on users performing tasks.		
	Severity 4 also covers general questions about Subscription usage/functionality, and non-Subscription issues such as requests for support network web site access, problems using the support network, or other issues that do not impact usability of the Subscription.		

Support Table B		
Severity Definition	Initial Response Time Target	
Severity 1	15 minutes	
Severity 2	1 hour	
Severity 3	4 hours	
Severity 4	8 hours	

Maintenance for the Subscription is fully described on this <u>Exhibit 3</u>, and this <u>Exhibit 3</u> supersedes the Maintenance Schedule under the MSLSA. Pegasystems will not be responsible for resolving problems or errors caused by (a) Customer-provided software or hardware outside of the underlying architecture and supporting systems of the Subscription, (b) unauthorized modifications to the Subscription, (c) Customer Applications that are not Guardrail Compliant, or (d) Customer's failure to follow the operating procedures and development guardrails described in the Subscription Documentation. Pegasystems will not be responsible for resolving problems or errors that reside within the Customer Application or that Customer cannot reproduce under test conditions.

Subscription Updates

Subscription Updates support the evolution of the Software and Environments that support the Subscription. They provide new functionality and enhancements within the functional domain of the Subscription. Updates periodically consist of:

- Software updates: sets of modifications for published generally available Software releases.
- Subscription Updates: Updates to the underlying architecture and supporting systems of the Subscription.
- Subscriptoin Documentation Updates: reflect changes to the Subscription policies and documentation.

Pega Discovery Network

The Pega Discovery Network ("PDN") is the primary technical resource for Customer's Software developers and system administrators. The PDN contains a broad range of technical articles including troubleshooting and "How-To" information, a comprehensive and searchable knowledgebase to help developers speed their application development, and a library of shared component examples, and copies of Subscription Documentation and Help systems. The PDN also enables members to access Pegasystems' on-line support resources in order to submit defect reports and enhancement suggestions, and to review all issues associated with the user's PDN account.

3. Production Environment Availability

a. Definitions

"Eligible Credit Period" is a single calendar month, and refers to the monthly billing cycle in which the most recent event giving rise to a service level claim occurred.

"Production Environment Monthly Uptime Percentage" is calculated by dividing each hour during which the Production Environment Subscription is scheduled to be available during a given Subscription Month into five minute periods, and then determining during which, if any, of those five minute periods, the Production Environment Subscription was Unavailable, subtracting that number from the total number of such minute periods in the Subscription Month during which the Production Environment Subscription was scheduled to be available (the "Scheduled Availability Number") and dividing that number by the Scheduled Availability Number. If Customer has been using the Production Environment Subscription for less than a full calendar month, the Subscription Month is still the preceding calendar month but any days in such month that are prior to the commencement of use of the Production Environment Subscription will be deemed to have had 100% availability. Monthly Uptime Percentage measurements exclude downtime resulting from a Subscription Suspension.

"Unavailable" or "Unavailability" means that the Production Environment is unresponsive during a five minute period and Customer is unable to launch a replacement Instance in order to access the Subscription.

b. <u>Production Environment Monthly Uptime Percentage Service Level</u>

Pegasystems agrees that the Production Environment Monthly Uptime Percentage shall be 99.95% of the Scheduled Availability Number each calendar month, measured on a 7x24 basis (7 days a week, 24 hours per day) (the "SLA"). In the event the Subscription does not meet the SLA in any Eligible Credit Period, Customer will be eligible to receive a Subscription Credit equal to 10% of the fees for such Eligible Credit Period as described below. For the sake of clarification, the SLA does not apply to non-Production Environments.

c. <u>Production Environment Subscription Credits</u>

Pegasystems will apply Production Environment Subscription credits against fees due under this Cloud Agreement for the Subscription in future months. Subscription credits will not entitle Customer to any refund for fees paid for the Subscription, or for any credit against fees due for any other software or services provided

by Pegasystems. Customer's sole and exclusive remedy for any Production Environment Subscription Unavailability is the receipt of a Production Environment Subscription credit as described in this section. Any downtime that is the basis for a Production Environment Subscription credit claim cannot be the basis for a future claim. To receive a Production Environment Subscription credit, Customer must submit a written request to Pegasystems that includes the dates and times of each incident of Unavailability along with server request logs that document the errors and outage, within 30 days of the end of the Subscription Month in which the Production Environment Unavailability occurred. If the Monthly Uptime Percentage of such request is confirmed by Pegasystems to be less than 99.95% for the Subscription Month, then Pegasystems will issue the Production Environment Subscription credit to Customer within one billing cycle following the month in which the request is received by Pegasystems.

- d. Customer acknowledges that non-Production Environments are used for testing and may be unstable due to the nature of their use. The service levels and credits do not apply to the Development/Test and Pre-Production Environments.
- e. The service levels and credits do not apply to any Unavailability, suspension or termination of the Subscription that result from: (i) Subscription Suspensions, (ii) any actions or inactions of Customer or any third party, (iii) the Customer Application, data, equipment, software or other technology and/or third party equipment, software or other technology (other than third party equipment within Pegasystems' direct control), or arise from Pegasystems' suspension or termination of Customer's right to use the Subscription.

SECURITY

Pegasystems will adhere to the following security practices:

- a. Access Control: Maintain access control measures restricting access to applications, data, and software to only those entities that have a documented, current business need. Access to the controlled systems are locked down by subnet, port, protocol, server, role, and User to allow only the access required for the business function.
- b. **Audit Controls**: Implement audit control mechanisms to record, monitor, and examine system activity, including data access activities.
- c. **Authorization Control**: Implement a mechanism for controlling the authorization of individuals, organizations, and roles to access applications, data, and software. Assure supervision of personnel performing technical systems maintenance activities by authorized, knowledgeable persons. Work to train Users, including technical maintenance personnel, in system security.
- d. **Data Authentication**: Create audit trail providing corroboration that data has not been altered or destroyed in an unauthorized manner at the infrastructure layer. The Customer is responsible for this at the application layer.
- e. **Entity Authentication for Instances provisioned**: Implement entity authentication technologies, including automatic logout and unique User identification through a password or equivalent system. Passwords or other user tokens shall be required to follow robust, documented policy requirements including:
 - a. Periodic reset/renewal every 90 days or less (Password ageing)
 - b. Complexity and length requirements in the case of passwords
 - i. No dictionary words
 - ii. No dates
 - iii. Mixed character types (at least three of lowercase, uppercase, numerals, and punctuation)
 - c. Lockouts after six unsuccessful authentication attempts
- f. **Encryption at Rest**: Encrypt sensitive data whenever stored on disk using 256-bit AES encryption (except in a Development/Test Environment).
- g. **Encryption in Flight**: Encrypt communications over a network containing sensitive data through TLS or a VPN IPsec tunnel to client endpoint.
- h. **Audits and Policy Compliance**: Upon written request, supply to the Customer documentation regarding the following policy components:
 - a. Pega Cloud Services Written Information Security Program (WISP)
 - b. Pega Cloud Services Disaster Recovery & Business Continuity Plan
 - c. Customer's Environment logs that are currently available
 - d. Executive summary of the security, data backup, and monitoring events for the Customer's Environment(s) that are currently available
- i. **Assigned Security Responsibility**: Assign and document the assignment of security responsibility to a specific individual or role within the service provider organization. This responsibility would include the management and supervision of the use of security measures and the conduct of personnel.

Attachment #2 DENR Contract 6095

PEGA CLOUD AGREEMENT



Pega CR-26593

j. **Physical Security**: Implement and document physical access controls (limited access) governing the service provider's location(s) that are used to access the Customer Applications, data, and softwar

Attachment #2 DENR Contract 6095

PEGA CLOUD AGREEMENT



