Category	PBT Analyst I	PBT Analyst II	PBT Analyst III	PBT Architecture/Analyst Sr.		
Job Purpose	The PBT (Power Business Technology) Analyst job series supports this District by analyzing, developing and implementing a portfolio of integrated software systems, applications, processes and complex data models used to optimize energy trading, scheduling, river operations, portfolio management activities and related risk mitigation and compliance activities.					
Core	Software Systems	Software Systems	Software Systems	Software Systems Development		
Functions	Development (15%) -	Development (25 %) -	Development (30%) -	(20%) - Develops and maintains		
	Maintains and assists in	Develops and maintains	Develops and maintains	custom application		
	development of custom	custom application	custom application	integrations, data processing		
	application integrations,	integrations, data	integrations, data processing	scripts, web based applications,		
	data processing scripts,	processing scripts, web	scripts, web based	desktop applications and		
	web based applications,	based applications,	applications, desktop	Microsoft Excel based analysis		
	desktop applications and	desktop applications and	applications and Microsoft	models/tools of high		
	Microsoft Excel based	Microsoft Excel based	Excel based analysis	complexity for systems that are		
	analysis models/tools.	analysis models/tools of	models/tools of high	critical to business continuity		
	Assists in and performs	moderate complexity for	complexity for systems that	and require 24x7 support.		
	basic database	systems that are critical to	are critical to business	These systems directly		
	development. Assists in	business continuity and	continuity and require 24x7	contribute to wholesale		
	management of IIS	require 24x7 support.	support. These systems	revenue, meeting minimum		
	administration and	These systems directly	directly contribute to	revenue requirements, P&L		
	provides basic	contribute to wholesale	wholesale revenue, meeting	reporting, credit risk mitigation,		
	troubleshooting of	revenue, meeting	minimum revenue	reporting, river operations and		
	application deployments.	minimum revenue	requirements, P&L reporting,	efficient hydro project		
	Develops and maintains	requirements, P&L	credit risk mitigation,	dispatch. Performs		
	experience in xml based	reporting, credit risk	reporting, river operations	programming and database		
	integration technologies	mitigation, reporting,	and efficient hydro project	development. Maintains		
	and industry standard data	river operations and	dispatch. Performs	expertise in xml based		
	exchange protocols.	efficient hydro project	programming and database	integration technologies and		
	Assists in the maintenance	dispatch. Maintains and	development. Maintains	industry standard data		
	and in the development of	assists in development of	expertise in xml based	exchange protocols. Develops		
	web based applications	advanced systems.	integration technologies and	web based applications using		
	using industry standard	Performs database	industry standard data	industry standard development		
	development frameworks.	development and	exchange protocols.	frameworks. Manages		

- Provides support to automate and streamline current analysis tools. Develops automated workflow processes and escalations. Develops reporting to support business processes.
- Systems
 Analysis/Implementation
 (30%) Assists senior level staff to implement proposed systems designs and implement Energy/Planning/Trading
 (EPT) technology.
 Performs documentation and training of limited complexity.
- Trading
 Operations/Business
 Analysis (25%) Works
 under the direction of
 more senior analysts to
 maintain and support
 trading models and
 systems. Participates in the
 analysis of strategies
 designed to further the
 Districts presence in
 current or emerging
 markets. Acts as a liaison
 between the front office.
- maintenance. Assists in management of IIS administration and provides troubleshooting of application deployments. Maintains experience in xml based integration technologies and industry standard data exchange protocols. Assists in maintenance and development of web based applications using industry standard development frameworks. Provides support to automate and streamline current analysis tools. Develops automated workflow processes and escalations. Develops reporting to support business processes.
- Systems Analysis and Design (25 %) – Performs systems analysis, design and implementation.
 Supports or leads feasibility study development and alternatives to problems of medium complexity.
 Manages

- Develops web based applications using industry standard development frameworks. Leads software projects involving multiple district staff both within and outside of Energy Planning and Trading. Often works collaboratively with less experienced analysts.
- Systems Analysis, Design and Architecture (20%) -Performs systems analysis, design and implementation in consultation with the PBT Architect. Identifies trading and transaction processing business requirements and translates into specific systems, application data, and/or process designs used to develop software solutions. Collaborates to determine software and data architecture solutions that meet performance, scalability, reliability and security needs. Participates in cross-functional teams to make architectural decisions related to software products, technology and system tradeoffs. Leads feasibility study development and
- software projects involving multiple district staff both within and outside of Energy Planning and Trading, as well as other organizations and contractors. Guides the work of less experienced analysts.
- Systems Design and Architecture (30%) - Identifies trading and transaction processing business requirements and translates them into systems software and technology enhancements that optimally integrate with new and existing systems. Designs system software and technology changes to EPT Systems based on experience and a thorough understanding of best practices. Determines software and data architecture solutions that meet performance, scalability, reliability and security needs. Participates in cross-functional teams to make architectural decisions related to software products, technology and system tradeoffs. Leads feasibility study development and alternatives to complex problems. Manages Energy/Planning/Trading (EPT)

- system operations and the real-time services provider.
- End User Support (25%)
 Provides 24x7 on-call basic application, transaction processing and hardware support to end users.
- Middle/Back Office Support (5%) – Assists in the maintenance and support for systems utilized by the District's middle and back offices, including those systems dedicated to credit reporting, index processing and billing/invoicing.
- Energy/Planning/Trading (EPT) business software projects of medium scope and pieces of larger projects. Develops, documents, and revises system design procedures, test procedures and quality standards. Assists senior level staff to implement proposed systems designs and implement EPT technology. Troubleshoots system technical and coding problems or errors.
- System Documentation & Training (15%) - Produces detailed documentation of systems and processes developed. Provides training to other departments on technologies and techniques utilized as well as the systems, processes and applications developed.
- Trading
 Operations/Business
 Analysis (10%) –
 Participates in the

- alternatives to complex problems. Manages Energy/Planning/Trading (EPT) software projects with medium to large scope and business impact. Develops timelines and resource requirement estimates. Troubleshoots system technical and coding problems or errors. Trains and mentors junior level staff; leads contractor personnel, if required
- Systems Documentation and Training (15%) – Produces detailed documentation of systems and processes developed. Provides training to other departments on technologies and techniques utilized as well as the systems, processes and applications developed. Implements and documents new and existing EPT software work procedures.
- Trading Operations/Business Analysis (10%) – Works with traders, or collaborates with less experienced analysts to develop new models to support trading and participates in the analysis of

- software projects with large scope and business impact. Develops timelines and resource requirement estimates. Troubleshoots system technical and coding problems or errors. Trains and mentors junior level staff; leads contractor personnel, if required
- Training (15%) Produces detailed documentation of systems and processes developed. Provides training to other department analysts on technologies and techniques utilized as well as the systems, processes and applications developed. Implements and documents new and existing EPT software work procedures.
- Trading Operations/Business
 Analysis (10%) Works with
 traders, or directs the work of
 less experienced analysts to
 develop new models to support
 trading and participates in the
 analysis of strategies designed
 to further the Districts
 presence in current or
 emerging markets. Acts as a
 liaison between the front
 office, system operations and

Education & Bachelor's degree (B.A	analysis of strategies designed to further the Districts presence in current or emerging markets. • End User Support (15%) – Provides 24x7 on-call support for basic applications, transaction processing and hardware support to end users consisting of Power Purchasers, EP&T staff, Generation, System Operations and Control System Engineering. Serves as system administrator / subject matter expert for one or more applications. • Middle/Back Office Support (10%) – Assists in the maintenance and support for systems utilized by the District's middle and back offices, including those systems dedicated to credit reporting, index processing and billing/invoicing.	•	strategies designed to further the Districts presence in current or emerging markets. Lead software & services procurement and contract administration. Develop, document, and revise system design procedures, test procedures and quality standards. End User Support (15%) – Provides 24x7 on-call basic support for applications, transaction processing and hardware support to end users consisting of Power Purchasers, EP&T staff, Generation, System Operations and Control System Engineering. Serves as system administrator / subject matter expert for one or more applications. Middle/Back Office Support (15%) – Develops and supports systems utilized by the District's middle and back offices, including those systems dedicated to credit reporting, index processing and billing/invoicing.	•	the real-time services provider. Lead software & services procurement and contract administration. Develop, document, and revise system design procedures, test procedures and quality standards. End User Support (10%) — Provides 24x7 on-call support for applications, transaction processing and hardware support to end users consisting of Power Purchasers, EP&T staff, Generation, System Operations and Control System Engineering. Serves as system administrator / subject matter expert for a variety of EPT business applications or functions. Provides District- wide training on EPT applications. Middle/Back Office Support (15%)— Develops and supports systems utilized by the District's middle and back offices, including those systems dedicated to credit reporting, index processing and billing/invoicing.
Certifications a technical or quantita	•		in a technical or quantitative		a technical or quantitative area

	such as Computer Science, Software Engineering, Management Information Systems, Engineering, Mathematics, Economics, Finance or equivalent; or equivalent combination of education and experience.	or quantitative area such as Computer Science, Software Engineering, Management Information Systems, Engineering, Mathematics, Economics, Finance or equivalent; or equivalent combination of education and experience.	area such as Computer Science, Software Engineering, Management Information Systems, Engineering, Mathematics, Economics, Finance or equivalent; or equivalent combination of education and experience.	such as Computer Science, Software Engineering, Management Information Systems, Engineering, Mathematics, Economics, Finance or equivalent; or equivalent combination of education and experience. Master's degree preferred.
Required Minimum Experience	No prior experience required. Experience performing applications development, programming, or systems analysis desired.	 Typically requires a minimum of two (2) years' experience as a Power Business Technology Analyst I or closely related experience such as a Business Analyst or Systems Analyst. Utility industry experience preferred. Experience in energy planning and trading preferred. 	 Typically requires a minimum of five (5) years' experience as a Power Business Technology Analyst I/II or closely related experience such as a Business Analyst or Systems Analyst. Utility industry experience preferred. Experience in energy planning and trading preferred. 	 Typically requires a minimum of eight (8) years' experience as a Power Business Technology Analyst I/II/III or closely related experience in systems analysis/design and development. Utility industry experience preferred. Experience in energy planning and trading strongly preferred.
Knowledge	 Working knowledge of District operations, policies, and practices. Basic technical knowledge of computer hardware, networks, security, and support Basic knowledge of system analysis, requirements gathering techniques and related documentation standards. 	 Same as level I, plus: Solid knowledge of system analysis, customer needs assessment, requirements gathering techniques and related documentation standards. Knowledge of software applications and systems 	 Same as level I & II, plus: High level knowledge of system analysis, programming languages and technologies, customer needs assessment, requirements gathering techniques and related documentation standards. High level knowledge of EPT systems. 	 Same as level I, II & III, plus: Advanced knowledge of system analysis, programming languages and technologies, customer needs assessment, requirements gathering techniques and related documentation standards. In-depth knowledge of EPT systems.

- Basic knowledge of programming languages.
- Computer scripting in 1 or more scripting languages.
- Basic understanding of database development, server administration, the use of various web development frameworks and data exchange protocols.
- Knowledge and experience with computer applications.

- in use at the District or other utility experience.
- Knowledge of Energy trading systems preferred.
- Proven knowledge of database development, server administration, the use of various web development frameworks and data exchange protocols.
- Computer programming and scripting in multiple languages
- General knowledge of District areas, generation, river operations, and business impacts.
- Knowledge of federal and state laws and regulations relating to the power industry.
- Understanding of the District's slice, real-time and forward/long-term energy contracts particularly those areas that impact the ETRM system and/or real-time systems.
- Advanced knowledge of the various types of transactions entered into

- Understanding of functional and technical interrelationships between departments and databases at the District that integrate with EPT systems.
- Solid knowledge of multiple programming languages and platforms.
- Advanced knowledge of areas within the District and their impact on generation and river operations, contracts and business relationships.
- Thorough understanding of functional and technical interrelationships between departments and databases at the District that integrate with EPT systems.
- Expert knowledge of multiple programming languages and platforms.
- Extensive knowledge of areas within the District and their impact on generation and river operations, contracts and business relationships.

Skills & Abilities	 Reasoning, analytical, and problem solving skills Work process modeling Data analysis and research Computer report writing Basic SQL skills Technical writing Ability to communicate logically and clearly, both orally and in writing Active listening Critical thinking reading comprehension Ability to prioritize multiple priorities Ability to learn new systems from documentation and training Ability to model and analyze Must have the ability to learn new technologies 	by the District and their inherent risks and impacts and the systems required to process those transactions. Same as level I, plus: Strong critical thinking skills and ability to apply to problem resolution Systems evaluation skills Project Management Strong verbal and written communication skills Database development Data reporting using ETL principles via various platforms. Ability to train other analysts and software end users. Ability to design, test and document a variety of applications Ability to identify potential problems and use logic and deductive reasoning to develop	Same as level I & II, plus: Project management skills including ability to lead cross functional teams Leadership skills Strong critical thinking and problem resolution skills Strong verbal and written communication skills Financial analysis skills Negotiation skills Capable of developing complex custom software applications, including web based applications.	Same as level I, II & III, plus: Strong Project management skills including ability to lead cross functional teams Strong leadership skills Advanced critical thinking and problem resolution skills Advanced verbal and written communication skills Advanced Financial analysis skills Advanced Negotiation skills Leads in development of more complex custom software applications, including web based applications.
Reasoning Ability	 Ability to apply common sense understanding to carry out detailed but uninvolved written or oral instructions. Ability to deal with problems 	 Solutions. Ability to apply common sense understanding to carry out instructions furnished in written, oral, or diagram form. Ability 	Ability to solve practical problems and deal with a variety of concrete variables in situations where only limited standardization	Ability to define problems, collect data, establish facts, and draw valid conclusions. Ability to interpret an extensive variety of technical instructions
	involving a few concrete	to deal with problems	exists. Ability to interpret a	in mathematical or diagram

	variables in standardized situations.	involving several concrete variables in standardized situations.	variety of instructions furnished in written, oral, diagram, or schedule form.	form and deal with several abstract and concrete variables.
Decision making	Follows established procedures. Establishes daily work priorities. May train lower level employees. Escalates problems or issues to supervisor and provides recommended solutions.	Works under general supervision. Free to determine most appropriate work methods. Acts as a resource for colleagues with less experience. Escalates unusual or complex issues to supervisor.	Works independently, under limited supervision. Acts as a resource for colleagues with less experience. Trains and mentor's others. May act as a team leader. Advises management on best work methods, processes and/or application of policy. Receives guidance in complex situations.	Identifies solutions to the most complex technical problems. Contributes to long-range strategy development. Considered a technical expert in at least one specialty area. Acts as a resource for colleagues with less experience. May act as a team leader. Trains and mentors others or supervise one employee. Works independently with significant interaction with senior management.
Complexity	Performs mostly routine work. Ability to complete tasks repeatedly with minimal variation. Applies knowledge of the organization and developed technical knowledge in the functional area to identify and recommend solutions to problems.	Prioritizes and performs a broad range of moderately complex technical or professional work. Solves day-to-day problems using established policies, regulations, or work rules.	 Manages and performs an extensive range and variety of complex technical or professional work activities, some without precedent. Takes a broad perspective to identify solutions. 	Manages and performs an extensive range and variety of complex technical or professional work activities, some without precedent. Takes a broad perspective to identify solutions.
Advancement/	This is the entry level position in	This is the second level of the	This is the third level of the PBT	This is the career or fully skilled
Career Path	the PBT Analyst job family.	PBT Analyst job family.	Analyst job family.	level position within the PBT Analyst job family. This is the level
	Employees hired into the Level I role are generally expected to develop the knowledge, skills and	To advance to the PBT Level III, the incumbent must have obtained the knowledge, skills	To advance to the PBT Architect/Analyst Sr., the incumbent must have obtained	at which an individual may remain for the duration of their career.

abilities to advance to the level II position. The typical advancement timeline is generally within three (3)+ years

In order to advance, the incumbent must be able to perform all the essential functions of the higher level position, at a basic level.

Advancement is subject to approval of the business need, salary budget availability, and may be subject to a competitive selection process.

and abilities of this level and be able to perform all the essential functions of the next higher level position, at a basic level. The typical advancement timeline is generally within four (4)+ years.

Advancement is subject to approval of the business need, salary budget availability, and may be subject to a competitive recruiting process.

the knowledge, skills and abilities of this level and be able to perform all the essential functions of the next higher level position, at a basic level. The typical advancement timeline is generally within four (4)+ years.

Advancement is subject to approval of the business need, salary budget availability, and may be subject to a competitive recruiting process.

Advancement is subject to approval of the business need, salary budget availability, and may be subject to a competitive recruiting process.