NEBOJSA PAVLOVIC, LL.M, FCIArb, PMP

Delay Claims Specialist, RICS Expert Witness
Principal Hydraulics Engineer

- Forensic Delay Analysis, Claim Consultancy, Construction Supervision, Project Management, Hydraulic Transient Expert

QUALIFICATIONS

- RICS Expert Witness, 2023
- LL.M in Construction Law and Arbitration at Robert Gordon University, Scotland, UK, 2021
- Fellow of the Chartered Institute of Arbitrators, 2018 (Membership No 39999)
- Project Management Professional (PMP), PMI, 2010 (Certificate No 1313744)
- Specialization in Environmental Science, Alternative Academic Educational Network, Serbia, 2000
- BSc (Hons) Civil Engineering, Faculty of Civil Engineering, University of Belgrade, Serbia, 2001

SOFTWARE PROFICIENCY

- Scheduling: Primavera P6, MS Project
- Hydraulic Transient Modelling: Hammer, Transam, WANDA Cebel Expert, SURGE 2016
- Steady State Hydraulic Modeling: EPANET, EPASWMM, HEC RAS, SewerCAD, WaterCAD
- Hydrology & Watershed Modelling: HEC HMS, WMS

CONTACTS

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Nebojsa holds a master's degree in Construction Law and Arbitration and Civil Engineering (Applied Hydraulics) and is RICS Expert Witness, certified Project Management Professional with 26 years of experience in Design, Management and Supervision of Infrastructure, Water, Wastewater, Irrigation, Industrial & Stormwater projects in the UAE, KSA, Oman, Qatar, Morocco, Cyprus & former Yugoslavia. Nebojsa is also a Fellow of the Charted Institute of Arbitrators, very familiar with FIDIC, IChemE, World Bank and ADB Conditions of Contract.

His experience is supplemented with Detailed Design of Industrial (Seawater & Distilled Cooling Water), Stormwater, Irrigation, Potable Water & Wastewater Treatment Plants, Pumping Stations, Transmission Pipelines, as well as design of large-scale Real Estate & Industrial developments, preparation of tender documents for construction & concession for various industrial & municipal schemes.

Being a Resident Engineer, he gained a considerable experience in Construction Supervision field. This includes claims preparation for contractors, review of claims for employers and Technical Expert witnessing. His experience provides an outstanding mix of Technical, Contractual & Project Management skills.

Professional Experience:

DNEC doo, Serbia, April 2024 – February 2025
Position: Commercial & Contract Manager (Red FIDIC 1999)

Belgrade Tower: Mixed-use tower (EUR 200+ mil), Belgrade Waterfront, Serbia.

Ad Litteram Consultancy LLC-FZ, September 2020 - Present
Position: General Manager

Technical & Claim Consultant supporting clients with input related to Claim Preparation and Defence, Forensic Delay Analysis and Technical Support in the field of Applied Hydraulics.

Engaged on SAR 6+ Billion VVIP Project in Riyadh as a Delay Consultant. The scope included recreation of the Programme, development of fragnets for 70+ Engineer's Instructions, 100+ Requests for Variations, coordination between Delay and Quantum Experts and development of Design Delay Claim (SAR 200+ Million). Yellow FIDIC 2017

Claim advisory services for Serbian potable water treatment plant (claim and variation analysis, consultancy) for the Engineer (SETEC), Yellow FIDIC 1999

Independent delay expert in a dispute over delayed civil works for two major 132/11kV substations for DEWA, UAE. Prepared Expert Report, Reply & Joint Statement, cross examined in Dubai (ICC Arbitration).

Participated as a Delay Claim and Technical Expert in a team that prepared EUR 100+ million claim for Contractor on a dispute over construction of 350 MW Power Plant in Serbia (Yellow FIDIC 1999).

Prepared an expert review for Hassyan Power Plant (2.4 GW) which has one of the largest seawater supply systems (132 m^3/s) in the GCC, where I addressed design and construction deficiencies and advised the Client about the improvement measures to be taken.

Prepared an expert report for the Stormwater System in Uzbekistan (justification of hydraulic capacity), Red FIDIC 1999.

Prepared a complex Forensic Delay Analysis & EOT Claim for the high-end project (UAE); four different AACE delay analysis methods used.

Attended one of the most comprehensive trainings for Forensic Delay Analysis, conducted by Chris Carson.

Prebid design (assessment of self-restraint sections) for TRANSCO DI Transmission Pipeline for Al Nasr.

Prepared Expert Report Review (Client is a major gas pipeline contractor) for:

- Flooding of agricultural land in Serbia (14 cases).
- Assessment of alleged additional works related to welding of steel pipes and fittings
- Review of group of road damage claims (20 cases) is performed for the same client.

Projects for Worley UAE in Morocco:

- Preliminary Design for 57,000 m^3/h Safi Seawater Intake Pumping Station.
- Assessment of an existing Safi Seawater Intake & Pumping Stations; total capacity 48,600 m^3/h.
- Preliminary Design for 114,150 m^3/h Jorf Lasfar Seawater Intake Pumping Station
- Assessment and upgrade study for 255,000 m^3/h Pumping Station in Jorf Lasfar
- Preliminary Design for Laayoun Seawater Distribution Pipeline, Pumping Station & Sea Outfall.

Independently developed claims that included delay, late payment, unjustified termination, design liability, variations, COVID-19 and force majeure for one German Contractor, for their projects in Somaliland (Pink FIDIC 2005) and Mongolia (Asian Development Bank Standard Conditions)

Stantec UK Limited, April 2018 – August 2020
Position: Resident Engineer

Responsible for managing Construction Site Supervision including the Design Review of Terminal Pumping Station (TPS) Project that is part of the Deep Tunnel Stormwater System of Dubai.

Internal diameter of the tunnel arriving to the TPS is 10 m; 4 pumps with total capacity of 36 m^3/s @ 55 m.

The depth of the pumping station built on an artificial island is 55 m. The scope includes three DN 2000 HDPE Sea Outfall pipes and one 132/11 kV DEWA substation. The value of the project is ~EUR 200 million.

Responsibilities also included evaluation of Contract Claims and coordination with Dispute Resolution Board.

Freelance Water and Utilities Consultant September 2017 – April 2018

Expert Witness for the Claimant in Arbitration in Oman. Responsible for the preparation of Witness Statement, Joint Witness Statement and coordination with the Claimant's Counsel during an entire Arbitration Process.

Attended the Hearing and gave statement before Arbitration Tribunal in London (London Court of International Arbitration).

Al Mansoor International Company LLC, April 2017 – September 2017
Position: General Manager

Responsible for management of the Company that secured Contract for the Operation and Management of complete Water Transmission System of the Sultanate of Oman and three of its regions where Distribution Systems were managed. Development of the communication protocols and certification procedure for the KPI and payment, sorting various types of disputes and planning an overall strategy of the Company.

The company had over 1,150 employees. The value of the projects is >OMR 65 Million (EUR 150 Million).

Malcolm Pirnie / Arcadis, February 2014 – March 2017

Position: Engineering Manager

Project Management and technical oversight of all design projects for Oman

Qurayyat Tie in Pumping Station Detailed Design (200,0000 m^3/d), Client: Elecnor Target JV

- Management and coordination between consultants, equipment suppliers and investigation companies.
- Preparation of all detailed design hydraulics deliverables (Steady / Unsteady State, Surge Protection)
- Management of detailed design of the Pumping Station (Mechanical, SCADA, HVAC, Electrical)
- Preparation of Technical Part of Extension of Time justification

Al Misfah Sewage Treatment Plant (32,000 m^3/d), Client: Haya Water

- Preliminary Design of Odour Control and TSE Pipeline between Al Misfah and Al Ansab STP
- Detailed design of TSE Transmission line between Al Misfah and Al Ansab Treatment Plants
- Tendering Services, Evaluation of EPC bids (IChemE Standard Condition of Contract)

Water Supply Scheme for Sharqiyah Region; Client: PAEW:

- Design Review along with Review of the Claims and negotiations in their settling

Assessment and Upgrade of SWIPS 1; Client: Majis:

- Assessment & recommendation for an upgrade of the inlet capacity of the Seawater Pumping Station 1
- Evaluation of Hydraulics for SWIPS 1 & SWIPS 2 (both pumping stations with capacity of 400,000 m^3/h)
- Detailed Design of accommodation of turbine pump (1,500 m^3/h) into SWIPS 2 and RO supply pipeline

Sea Outfall and Wastewater Pumping Station in Salalah (Client: SSDC):

- Review of the Contractor's claims (unforeseen ground condition, extension of time)
- Design Review for an existing tunnel & Sea Outfall; development of the hydraulic model for all elements

Secondment to MODON, Riyadh, Saudi Arabia (4 months in 2015)

- Preparation of the Requests for Proposals for the Sewage Treatment Plants and Desalination Plants
- Selection of contractors, Design Review, development of the RFP for the large Concession Contract for two industrial cities, evaluation of claims for the extension of time for two desalination plants

Asset Management for the National Water Company in the KSA (2015)

- Preparation of the Asset Survey for two major WWTP (>300,000 m^3/d) in Makkah Area
- Risk Based Corrective Actions for Ras Tanura Refinery & DMMM-2 Groundwater Characterization Study (Client: Saudi Aramco, KSA)

Company: Renardet SA and Partners, July 2013 – January 2014

Position: Head of Utilities

- Construction Supervision Support for technical (Highway Irrigation and Drainage) and contractual matters
- Preparation of prequalification documents, technical and financial proposals for various tenders

Company: KEO International Consultants, Sultanate of Oman, September 2011 - July 2013

Position: Senior Project Manager - Infrastructure

- Complex Hydrology and Hydraulic Modelling and Optimization of Water and Irrigation Systems
- Wastewater & Stormwater Pumping Station and Pipeline Design

Commissioning of the Upper Bowsher Pumping Station (2012) Client: Al Hassan

Preparation of the method statements for initial filling of pipelines, pipeline testing and start-up of the system, surge protection calculations and GA Drawings of the surge protection. 6.9 km of DN 800 DI Pipeline; Capacity of the pumping station was 556 l/s @ 90 m.

Muscat International Airport Underground Utilities Modelling (2012) Client: Bechtel

Development of 3D model for all utilities for the Muscat Airport Parking; utilities are designed by different parties and needed close and accurate coordination. Work is performed in Civil 3D based on the data provided in different formats (topographical survey, longitudinal profiles) and performing the clash check.

Experience Highlight

I worked closely with equipment vendors, main clients and contractors employed on Industrial and Municipal Projects. The table below shows the summary of the projects I worked on (all included NPSH assessment, Steady and Unsteady Calculations, design of Surge Protection, selection of equipment and its setting).

Worked closely with Kentucky University that developed SURGE 2008 and addressed some problems discovered in the software engine (control valves behaviour during transient).

No	Pumping Station				Pipeline			Project Details		
	Name	Q [l/s]	H [m]	Fluid Handled	L [km]	DN [mm]	Material	Project Name	Client	Owner
1	Musannah	388	230	Potable Water	29.0	800	MS X42	Water Supply to South Al Batinah	HJB Oman	PAEW Oman
2	Hazm	246	200		41.5	700	MS X42			
3	Rustaq	144	175		18.3	400	DI			
4	Wadi Assan	57	180		5.8	300	DI			
5	Awabi	18	130		7.5	200	DI			
6	Barka New	117	150		12.2	500	MS X42			
7	Hubra	105	160		21.2	400	DI			
8	Nakhal	6	140		13.2	200	DI			
9	Khafdi	30	240		22.2	300	DI			
10	Ad Das	15	180		7.0	200	DI			
11	Barka Main	640	145		49.3	1,000	MS X42			
12	BPS 3	964	245	Potable Water	14.0	900	MS Gr. B	Water Supply to Bid Bid, Fanja, Samail, Izki and Nizwa	HJB Oman	PAEW Oman
13	BPS 4	504	220		38.2	600	MS Gr. B			
14	BPS 5	110	170		11.5	500	DI			
15	Al Kamil	685	205		48.0	800	MS X42	Water Supply to Ibra, Kabil and Bidiyah		
16	Al Shariq	575	145		21.0	700				
17	Main PS	655	165	Potable Water	27.5	800	DI	Water Supply to Duqum Industrial Area	GPS Oman	PAEW Oman
18	Airport PS	14	60		7.5	200	DI			
19	Barka Main 1	775	125		78.0	1,000	MS X52	Barka PS Upgrade	KSB	
20	Barka Main 2	3,000	90		33.2	1,600				
21	Upper Bowshar	556	90		6.9	800	DI	Upper Bowshar	Al Hassan	
22	DR 1	10.5	325	Potable Water	5.9	200	DI	Water Supply to Niabat Jabal Akhdar	Al Meedania Engineering Consultancy	PAEW Oman
23	TR 1	52	175		5.5	400				
24	TR 2	52	350		3.0	400				
25	TR 3	52	345		1.7	400				
26	TR 4	52	410		2.0	400				
27	TR 5	52	355		8.5	400				
28	Gharaffa 1	1,350	56	Potable Water	Dist.*	1,200	DI	Water Supply to W. Bay & Gharaffa	HJB Qatar	KAHRAMA Qatar
29	Gharaffa 2	1,350	56		Dist.*	900	DI			
30	West Bay	3,600	56		Dist.*	2 x 1200	DI			
31	Sur	73	90	Raw Sewage	6.5	250	DI	Wastewater Scheme for Sur and Buraimi	Al Ansari	MRMEWR Oman
32	Buraimi	173	73		7.3	400	DI			
33	Shadeed	4,580	47	Seawater	5.0	2 x 1700	GRP	Shadeed Iron & Steel	Shadeed Oman	
34	CCWS	18,330	35	Seawater	14.5	2 x 2200	GRP	CCWS in Sohar Port	Al Adrak	MISC Oman
35	MISC BS	460	50	Distillate	7.5	700	GRP	Distilled Water Supply	WJT	
36	STP PS	1,000	85	TSE	18.1	900	HDPE	A' Seeb Wastewater Scheme	HAYA Water Oman	HAYA Water Oman
37	Mobellah PS	250	70		Dist.*	630	HDPE			
38	Al Khoudh PS	750	75		Dist.*	710	HDPE			
39	Tie In PS	2,525	386	Potable Water	45	1400 / 1600	MS X52	Qurayyat Tie In	ETJV	PAEW Oman

*The pumping has been performed to the Distribution Network

Hydraulic Justification of the Mishref (Wastewater) Pumping Station (2012)

The pumping station has capacity of 4.7 m^3/s and is one of the largest in the GCC. The Client wanted an independent investigation that would show if the operational conditions were not matching the selected equipment (as suggested by the Contractor) or the use of fabricated bearings (as suggested by the Pump Manufacturer) has caused bearing overheating. Detailed hydraulic modelling, supported by measurement of key parameters, was conducted and the results showed that the problem was caused by fabricated bearings.

Ras Al Hamra Development (2011-12) Client: Petroleum Development Oman

Management of all design activities of an entire infrastructure for 1,000 residential units' development for Petroleum Development Oman (PDO). The scope of work included School, Residential units and a Golf Course. Close coordination with the contractors on the site (Phase 1 and 1A of the development) and representing the client (PDO Ras Al Hamra) during coordination activities with PDO industrial area (Mina Al Fahal) and all other utility providers, consultants and regulating authorities. Detailed Road, Water, Wastewater, Stormwater, Irrigation, Telecom and LV & MV Power Supply Design was included in the scope.

Beautification of Al Ansab and As Seeb STPs (2012) Client: Haya Water

Assessment of existing / proposed TSE pumping stations, irrigation network and incorporation of landscaped area in the Irrigation Scheme. Assisted the Project Manager in preparation of extension of time claim.

PARSONS International, Sultanate of Oman, January 2007 - August 2011 Position: Project Manager

Review of the Seeb Wastewater Scheme design deliverables (2008-2011):

- Review of dewatering of three pumping stations segmental vertical shafts (diameter 18 m, depth 16 m)
- Evaluation of the structural stability during construction and improvements of the dewatering methodology

Repair of GRP Pipes in the Sohar Port (2011)

Design of dewatering system, selection of material for sealing the GRP Pipes from internal side (Polyurea) and supervision of works. Client: Sohar International Urea & Chemical Industries (SIUCI).

Detailed Design of Extension of Water Supply Networks at Buraimi Governorate (2010-2011):

The scope of work included development of the Transmission Lines and Distribution Networks for more than 15 villages scattered on the stretch of more than 200 km and planned areas in urban zone of Buraimi town. Investigation of current system and incorporation of several sources in the water supply scheme was the most challenging part, having in mind that the supply areas are very much scattered and that there is already relatively complicated interconnection of sources. Client: Public Authority for Electricity and Water (PAEW)

Optimization of Treated Effluent Transmission & Distribution System in As Seeb Wastewater Scheme (2010):

Introduction of Counter Reservoirs, abandoning of VFDs & reduction of line diameters were the major achievements of this Study. Complex Hydraulic Modelling, development of different operating scenarios is performed in the process. Surge Protection and Chlorine Decay Modelling were also part of the Study. Four pumping systems were under the scope and the largest one is 750 l/s @ 60m head. Client: Haya Water

Potable Water/Irrigation/Wastewater/Stormwater Scheme for the Blue City Phase 1 (2009):

Irrigation and Potable Water schemes along with the detailed design of two pumping stations, each of them with similar capacity of 200 l/s. The largest wastewater pumping station capacity was 392 l/s. Detailed Design of Wastewater and Stormwater including the Hydrology Modelling considering coordination with other facilities (designed by others). Client: Blue City Development

Detailed design of two Stormwater Pumping Station in Sur (2008) Client: Strabag

Inspection of an existing drainage system, hydrology and hydraulic modelling of various drainage scenarios, concept & detailed design of a drainage system, preparation of specification and selection of equipment.

Preliminary Design for the Irrigation Transmission System of the Muscat Expressway (2008):

Preliminary Design and detailed hydraulic modelling of ≈55 km of PN 16 HDPE Pipeline with diameters ranging from DN 110 to DN 630. The system has three pumping stations, the largest one is Q=200 l/s @ 80 m. The Counter – Reservoirs are used for the first time in Haya Water projects to equalize the peak irrigation consumption and to minimize the running costs of the System. Client: Haya Water

Detailed design (for the Contractor) of the Process Water Transmission System in Sohar Port (2007):

The project included detailed design of the 4,000 m^3 Steel Storage Tank, 40,000 m^3/d Pumping Station equipped with five pumps capable to pump water at 50 m. The transmission system consists of 10 km of GRP pipeline along with the valves, pressure and flow transmitters. Client: Towel Engineering

Detailed design of Common Cooling Water System in the Sohar Port, Piping Part of the system (2007):

The scope of work included detailed design of the Piping Part of the system (GRP pipeline up to DN 2,200 mm in diameter) along with all other equipment required by the tender (valves, air valves, temperature, flow and pressure transmitters). Complete Surge Protection (considering "the pumping part of the system") was designed. The Surge Protection consisted of weight loaded hydraulically operated butterfly valves coupled with triple action air valves. The client was the contractor for the piping part (Al Adrak).

Assessment of the GRP Pipe Failure at DN 2,500 GRP Line (2007)

Technical Expertise for assessment of mechanism of opening of a double bell coupler and root cause analysis of the failure that resulted in damaging foundations of other tenants' assets, flooding with mud of an entire Seawater Pumping Stations and stoppage of cooling system for an entire Sohar Port, thereby stopping all industries that use seawater for cooling. Client: Sohar International Urea & Chemical Industries (SIUCI).

Detailed Design of All Water Services for Steel Factory in Sohar (2007) Client: Shadeed Steel.

Seawater Vertical Tubular Pumps selection (16,500 m^3/h @ 47 m) with Detailed Design of dual GRP Pipeline (DN 1,700) plus all other wet services inside the factory (Process / Potable Water, Wastewater, Firefighting).

The scope of work covered:

- Hydraulic Modelling of the System (for all services) including Surge Protection (SURGE 2008) for seawater supply system.
- Conceptual, Preliminary, Detailed Design and Preparation of Tender Documents
- Construction Supervision support including Design Verification

Ministry of Housing, Electricity and Water, Oman (November 2005 – January 2007)
Consulting Engineer (Secondment from Energoprojekt)

- Technical Consulting of Management in Directorate of Water
- Training of Staff in Hydraulics and Mathematical Modelling of Pressurized Networks
- Preparation of Tender Documents for the Consultancy Services
- Review and Verification of Design Documentation
- Instruction of Variations to Design Scope of works, evaluation of time extension claims

Energoprojekt Entel LLC Muscat, Oman (January 2005 - January 2007)
Hydraulic Designer
Rehabilitation of four Sewerage Treatment Plants in Muscat (Energoprojekt)

- Max capacity 12,000 m^3/d, Hydraulic Calculations for all pumps (Wastewater, TSE, Filter Backwash).

Sohar Water Transmission Project (2005-2006)

Water Transmission System, 292km of MS and DI Pipeline, Capacity of the Main Pumping Station 2,900 l/s, five Pumping Stations, the largest one 3+1 Q=670 l/s each @ 125 m, 12 Water Tanks (the biggest one V=150,000 m^3). Client: Public Authority for Electricity and Water. My role was to:

- Review & Verify Project Documentation: Pipeline & Pumping Station Design Check and Verification
- Independently develop Hydraulic Transient Model & verify the proposed Protection (EPANET / SURGE 2000). ARI Air Valves used for the first time in Oman as Surge Protection.

SOGREAH Nicosia, Cyprus (October 2003 – November 2004)
Hydraulic Modeller

Detail Design of Sewerage Network for 28 Cyprus villages:

- Hydraulic Modelling of the Gravity Collection Network (EPASWMM and SewerCAD)

- Hydraulic Transient Modelling & Protection (CEBEL Expert) for all pumping stations
- Detail Design of Sewerage Network Pumping Station and Force Mains
- Participated in the review of SWMM software developed by US EPA

IWA Consalt Belgrade, Serbia (January 1999 - October 2003)
Hydraulics Engineer

- Site Supervision, Building Services
- Hydraulic Modelling (EPANET)